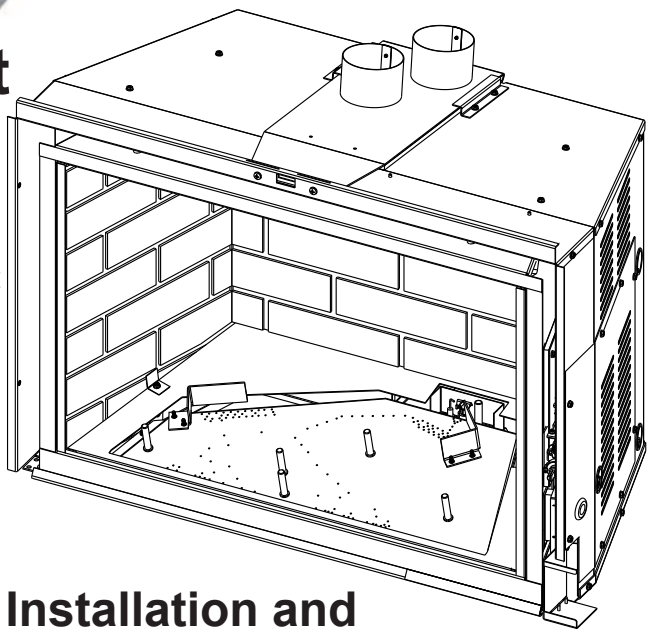
MONESSEN

ICFDV Series Direct Vent Gas Fireplace Insert

Models:
ICFDV30LNTSC, ICFDV30CNTSC



Installation and Operating Instructions

WARNING

IF THE INFORMATION IN THESE INSTRUCTIONS IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

- **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**
- **WHAT TO DO IF YOU SMELL GAS**
  - **Do not try to light any appliance.**
  - **Do not touch any electrical switch; do not use any phone in your building.**
  - **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
  - **If you cannot reach your gas supplier, call the fire department.**
- **Installation and service must be performed by a qualified installer, service agency or the gas supplier.**

WARNING: Improper installation, adjustment, alteration, services or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

This appliance may be installed in an aftermarket*, permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes.
This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

* **Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.**

DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.

CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURE AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.

YOUNG CHILDREN SHOULD BE SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.

KEEP THE ROOM AREA CLEAR AND FREE FROM COMBUSTIBLE MATERIALS, GASOLINE, AND OTHER FLAMMABLE VAPORS AND LIQUIDS.

INSTALLER: Leave this manual with the appliance.

CONSUMER: Retain this manual for future reference.

20304164 10/11 Rev. 1

Thank you and congratulations on your purchase of a Monessen Fireplace Insert

PLEASE READ THE INSTALLATION AND OPERATION INSTRUCTIONS BEFORE USING THE APPLIANCE!

IMPORTANT: Read all instructions and warnings carefully before starting installation.
Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

Important Safety Information 3
Code Approval 4
Product Features
High Elevations 5
Gas Pressures 5
Gas Specifications 5
Insert Dimensions 6
Installation Information....7
Before You Start....7
Insert Applications....7
Clearances....7
Clearances 8
Insert Clearances....8
Mantel Clearances 8
Hearth Requirements....8
Installation....9
Insert Placement 9
Zero-Clearance Fireplace Requirements....9
Venting Installation....10
Installation Precautions....10
Venting Requirements....10
Altitude Considerations 11
Venting Configurations....12
Intake/Exhaust Manifold Removal & Vent ....
Installation....13
Insert Installation....14
Check Gas Type....14
Install Gas to Insert Location 14
Installation Items Needed 14
Check Gas Pressure....16
Electrical Installation....17
Electrical Wiring 17
Log Placement....18
Surround Installation 22
Operating Instructions....24
For Your Safety Read Before Lighting 24
Operating Instructions....25
To Turn Off Gas....25
Signature Command System Operation....26
Touch Screen Remote Control Operation 29
Air Shutter Adjustment 35
Glass Frame Removal....36
Blower Removal and Assembly 37
Cleaning and Maintenance 38
Venting System 38
Cleaning Glass....38
Pilot and Burner Flames 38
Firebox Cleaning....39
Yearly Service Procedure....40
Troubleshooting 41
Replacement Parts 42
Optional Accessories 44
For Massachusetts Residents ONLY 46
Warranty 47
Efficiencies....48

INSTALLER

Please leave these instructions with the appliance.

OWNER

Please retain these instructions for future reference.

WARNING

- **Read this owner's manual carefully and completely before trying to assemble, operate, or service this fireplace.**
- **Any change to this fireplace or its controls can be dangerous.**
- **Improper installation or use of this fireplace can cause serious injury or death from fire, burns, explosions, electrical shock and carbon monoxide poisoning.**

This fireplace is a vented product. This fireplace must be properly installed by a qualified service person. The glass door must be properly seated and sealed. If this unit is not properly installed by a qualified service person with glass door properly seated and sealed, combustion leakage can occur.

CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, the fireplace may not have been installed properly. Get fresh air at once! Have the fireplace inspected and serviced by a qualified service person. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

Propane/LP gas and natural gas are both odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases unless a certified kit is used.
2. For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
3. If you smell gas
   - shut off gas supply.
   - do not try to light any appliance.
   - do not touch any electrical switch; do not use any phone in your building .
   - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
4. Never install the fireplace
   - in a recreational vehicle
   - where curtains, furniture, clothing, or other flammable objects are less than 36" from the front, top, or sides of the fireplace
   - in high traffic areas
   - in windy or drafty areas
5. This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
6. Carefully supervise young children when they are in the room with fireplace.
7. Do not modify fireplace under any circumstances. Any parts removed for servicing must be replaced prior to operating fireplace.
8. Turn fireplace off and let cool before servicing, installing, or repairing. Only a qualified service person should install, service, or repair the fireplace. Have burner system inspected annually by a qualified service person.
9. You must keep control compartments, burners, and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust. Turn off the gas valve and pilot light before cleaning fireplace.
10. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. Refer to *Cleaning and Maintenance*, Page 38.
11. Keep the area around your fireplace clear of combustible materials, gasoline, and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
12. Do not use this fireplace to cook food or burn paper or other objects.
13. Never place anything on top of fireplace.

Continued on page 4

Continued from page 3

14. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on rating plate.
15. This appliance, when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*, or the *Canadian Electrical Code, CSA C22.1.*
16. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
17. Do not use fireplace if any part has been exposed to or has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control which as been submerged in water.
18. Do not operate fireplace if any log is broken.
19. Do not use a blower insert, heat exchanger insert, or any other accessory not approved for use with this fireplace.
20. Do not operate the fireplace with glass door removed, cracked, or broken.

CODE APPROVAL

Direct Vent type appliances draw all combustion air from outside of the dwelling through the vent pipe.

These appliances have been tested by CSA and found to comply with the established standards for DIRECT VENT GAS FIREPLACE HEATERS in the USA and Canada as follows:

LISTED VENTED GAS FIREPLACE HEATER

TESTED TO:

ANSI Z21.88-2009/CSA 2.33-2009 STANDARDS

A manufactured home (USA only) or mobile home OEM installation must conform with the ***Manufactured Home Construction and Safety Standard,*** **Title 24 CFR, Part 3280,** or when such a standard is not applicable, the **Standard for Manufactured Home Installations, ANSI/NCSBCS A225.1**, or **Standard for Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4**.

IMPORTANT:
PLEASE READ THE FOLLOWING CAREFULLY

It is normal for fireplaces fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

IMPORTANT:
PLEASE READ THE FOLLOWING CAREFULLY

It is not unusual for gas fireplaces to give off some odor the first time it is burned. This is due to the manufacturing process.

Please ensure that your room is well ventilated during burn off — open all windows.

It is recommended that you burn your fireplace for at least ten (10) hours the first time you use it. Place the fan switch in the “OFF” position during this time.

WARNING **Never connect unit to private (non-utility) gas wells. This gas is commonly known as wellhead gas.**

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

⚠ WARNING

HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

PRODUCT SPECIFICATIONS

- This appliance has been certified for use with either natural or propane gas. Refer to the appropriate data plates.
- This appliance is not for use with solid fuels.
- The appliance is approved for bedroom or bedsitting room installations.
- The appliance must be installed in accordance with local codes if any. If none exist use the current installation code. ANSI Z223.1/NFPA 54 in the USA, CSA B149 in Canada.
- This appliance is mobile home approved.
- The appliance must be properly connected to a venting system.
- The appliance is not approved for closet or recessed installations.

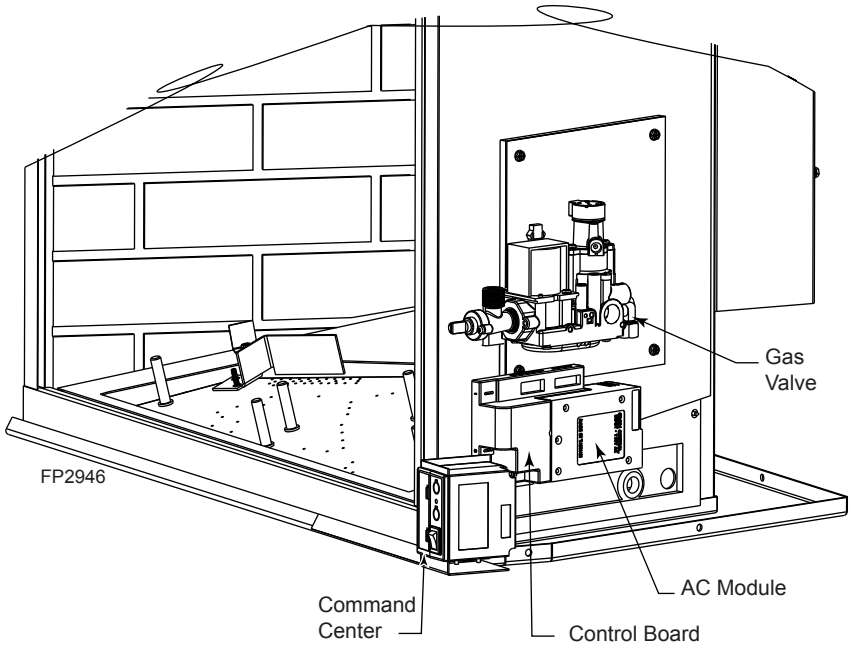


Figure 1 -
ICFDV Series Fireplace Insert Controls

HIGH ELEVATIONS

Input ratings are shown in BTU per hour and are certified without deration for elevations up to 4,500 feet (1,370 m) above sea level.

For elevations above 4,500 feet (1,370 m) in USA, installation must be in accordance with the current ANSI Z223.1/NFPA 54 and/or local codes having jurisdiction.

In Canada, please consult provincial and/or local authorities having jurisdiction for installation at elevations above 4,500 feet (1,370 m).

GAS PRESSURES

	Natural	Propane (LP)
Inlet Minimum	4.5” w.c.	11.0” w.c.
Inlet Maximum	10.5” w.c.	13.0” w.c.
Manifold Pressure	3.5” w.c.	10.0” w.c.

GAS SPECIFICATIONS & ORIFICE SIZE

Model	Fuel	Max.Input BTU/h	Min. Input BTU/h	Orifice Size
ICFDV30LNTSC	Nat.	31,000	22,500	#36

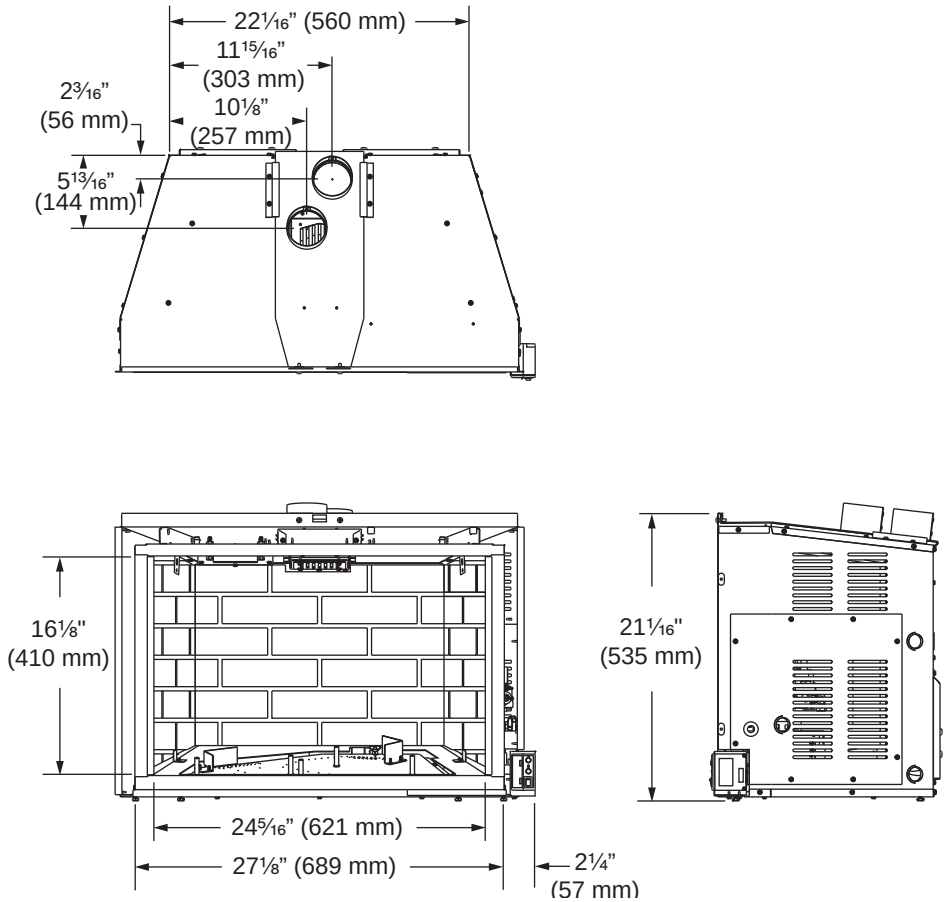


Figure 2
ICFDV Fireplace Insert Dimensions

BEFORE YOU START

Read this homeowner manual thoroughly and follow all instructions carefully. Inspect all contents for shipping damage and immediately inform your dealer if any damage is found. Do not install any unit with damaged, incomplete, or substitute parts. Check your packing list to verify that all listed parts have been received.

The following factors should be taken into consideration:

- This insert should have sufficient access for its safe operation and maintenance.
- The flow of combustion and ventilation air must not be obstructed.
- Minimum clearances to combustibles, such as mantels, must be maintained. *Refer to Pages 8 and 9, Figures 3 and 4.*
- Never obstruct the front opening of the insert.
- Do not install in the vicinity where gasoline or other flammable liquids may be stored.
- These units can be installed in a bedroom. Refer to National Fuel Gas Code ANSI Z233.1/ NFPA 54 (current edition), the Uniform Mechanical Code (current edition), and Local Building Codes for specific installation requirements.

IMPORTANT: Your direct vent insert was designed to be installed in an existing wood burning fireplace. The location and clearances are subject to local building codes.

INSERT APPLICATIONS

Before installing the gas fireplace insert, consider the functioning needs of the fireplace. Confirm the size of the fireplace cavity, the design of the chimney, and the availability of the gas supply and electricity for the insert fan.

IMPORTANT: Your direct vent insert is designed to be only vented vertically with a minimum height of 10 feet.

When the unit is installed into a wood burning fireplace, the minimum distance the mantel can be placed above the fireplace is governed by local building codes applicable to wood burning fireplaces. Consult local authorities having jurisdiction for these clearances. The underside of the mantel will become warm. Use only finishes which are heat resistant and do not discolor.

CLEARANCES

MINIMUM FIREPLACE SIZE/CLEARANCES TO COMBUSTIBLES

WARNING

The dimensions shown on *Pages 8 and 9, Figures 3 and 4*, are minimum clearances to maintain when installing this heater. Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

INSERT CLEARANCES

No combustibles (ie: drapes, doors) may be within, or swing within 36" of the front of the insert.

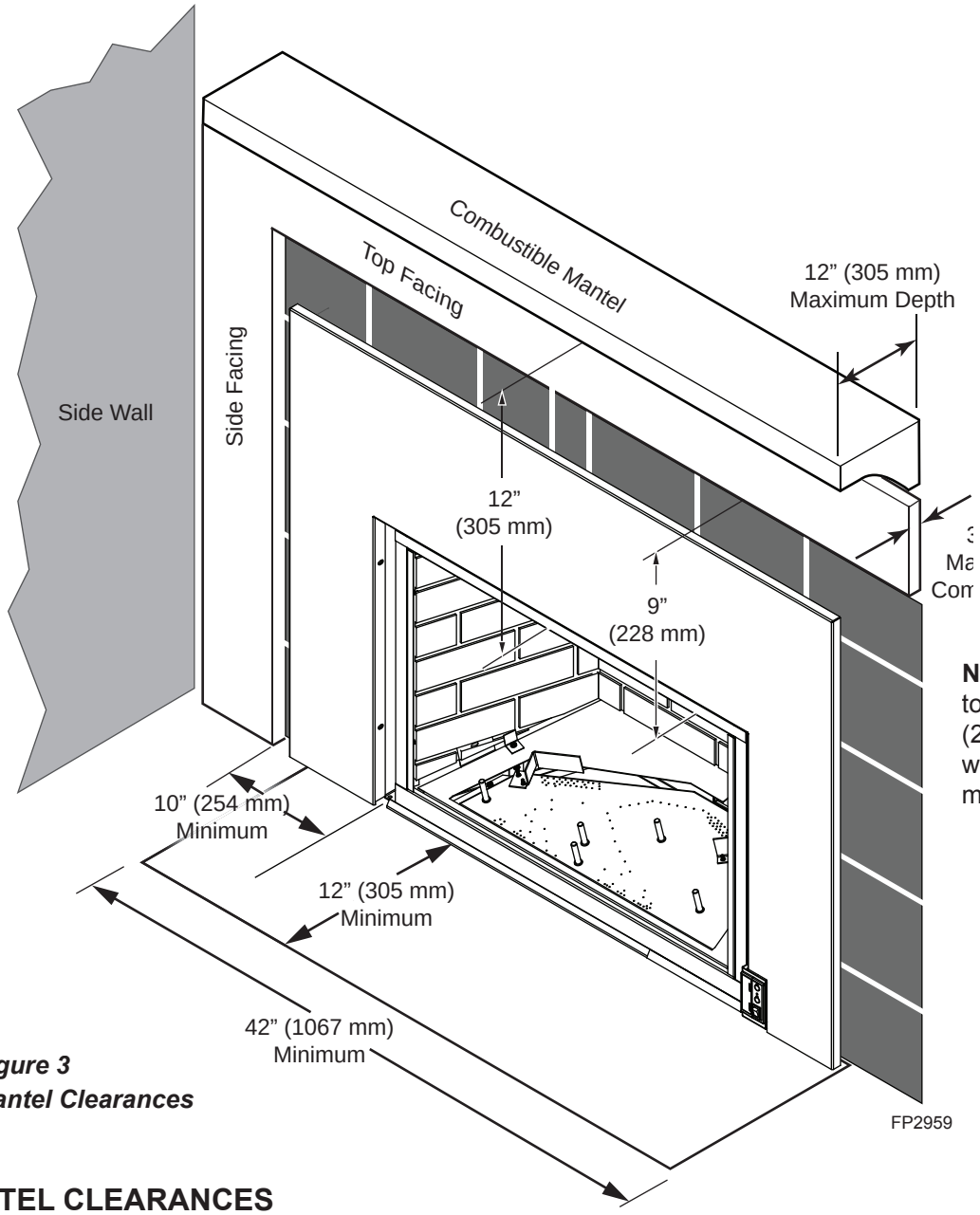


Figure 3
Mantel Clearances

NOTE: Side clearance to combustibles is 10" (254 mm) from opening whether it is side wall or mantel legs.

MANTEL CLEARANCES

NOTE: The combustible area above the facing must not protrude more than 3/4" from the facing. If it does, it is considered a mantel and must meet the mantel requirements listed in this manual.

HEARTH REQUIREMENTS

The insert must be installed on a noncombustible hearth extending a minimum of 12" from the fireplace opening (local codes may require a larger hearth). The hearth must also extend to both sides of the face.

INSERT PLACEMENT

- The insert must be placed within a code-conforming masonry fireplace or a tested and listed zero-clearance (UL-127, solid fuel) fireplace. Repair any fireplace damage prior to installation.
- Because the insert uses a circulation blower, clean the fireplace, smoke shelf and chimney before installing.
- This heater may be placed in a bedroom. Please be aware of the large amount of heat this appliance produces when determining a location.

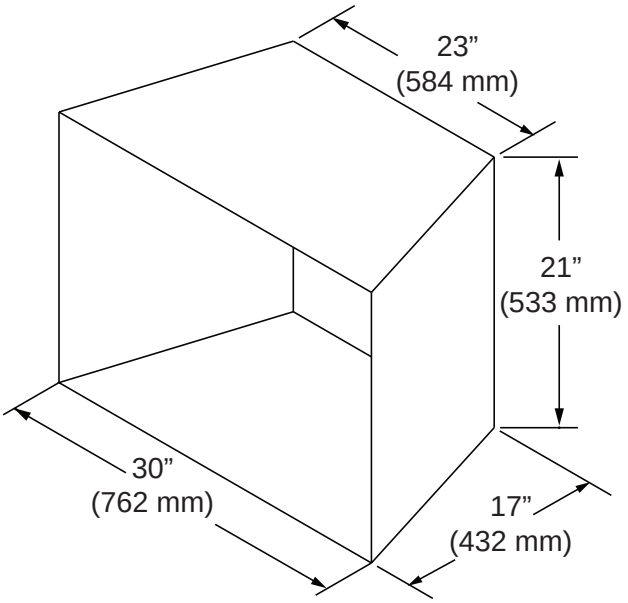


Figure 4 -
Minimum Openings

ZERO-CLEARANCE (METAL) FIREPLACE REQUIREMENTS

- The damper and grate must be removed.
- The smoke shelf, internal baffles, screen, refractory and metal or glass doors may be removed (if applicable).
- Do not remove or alter the insulation or any structured rigid frame members (metal sides, floor, door frames, face of the fireplace, etc.).

IMPORTANT: Please review the following carefully.

It is normal for inserts fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

It is not unusual for your insert to give off some odor the first time it is burned. This is due to the curing of the paint and any undetected oil from the manufacturing process.

Please ensure that your room is well ventilated. OPEN ALL WINDOWS DURING INITIAL BURN OFF/CURING PHASE.

Burn your insert for at least six (6) hours on "HIGH" the first time you use it. Place the fan in the "OFF" position during this time.

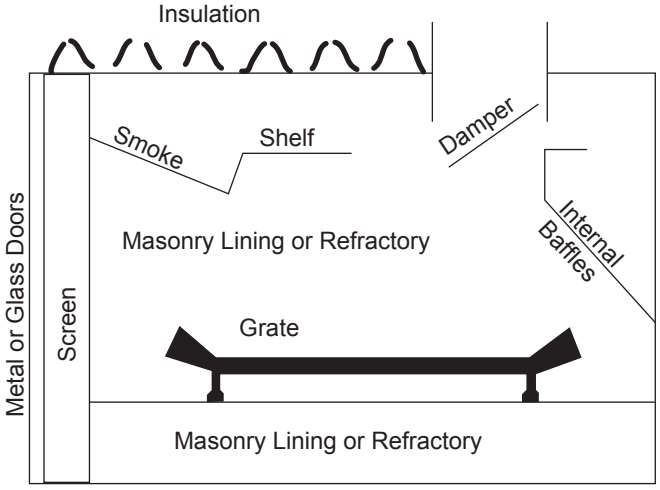


Figure 5 -
Metal Fireplace Zero-Clearance Requirements

WARNING

- **Installer must attach red warning plate to the inside of the firebox of fireplace with screws supplied.**
- **Do not cut any sheet metal parts of the fireplace in which this gas fireplace insert is installed. THIS IS STRICTLY PROHIBITED!**
- **If factory-built fireplace has no gas access hole(s) provided, drill a 1.5" (37.5 mm) or less through lower sides or bottom of firebox. You must plug the access hole with noncombustible insulation after gas supply line has been installed.**
- **If your factory-built fireplace has air passages on the face for zero clearance, DO NOT BLOCK THESE PASSAGES!**

WARNING

Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage or loss of life. Operation of improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

NOTICE

Failure to follow these instructions will void the warranty.

INSTALLATION PRECAUTIONS

Consult local building codes before beginning the installation. The installer must make sure to select the proper vent system for installation. Before installing vent kit, the installer must read this insert manual and vent kit instructions.

Only a qualified installer/service person should install venting system. The installer must follow these safety rules:

- Wear gloves and safety glasses for protection.
- Use extreme caution when using ladders or when on rooftops.
- Be aware of electrical wiring locations in walls and ceiling.

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component.
- Unauthorized modification of the venting system.
- Installation of any component part not manufactured or approved by MHSC.
- Installation other than permitted by these instructions.

WARNING

This insert must be vented to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance must use a separate vent system. Do not use common vent systems.

VENTING REQUIREMENTS

WARNING

- **Make sure the exhaust pipe on heater connects to exhaust portion of cap. Attach flex liners.** *Figure 6*
- **Do not crimp or rupture liner when bending it into chimney offsets.**

- The exhaust vent must reline the entire length of chimney and terminate above chimney top.
- Vent must meet all vent manufacturer's requirements when installed.
- Make sure you have the following before installing unit:
  - 3" and 3" UL 1777 Listed gas liner for air inlet and exhaust.
  - Vertical Terminations kits: HEDV32T812, HEDV32T1212, HEDVRT, A131AK33A

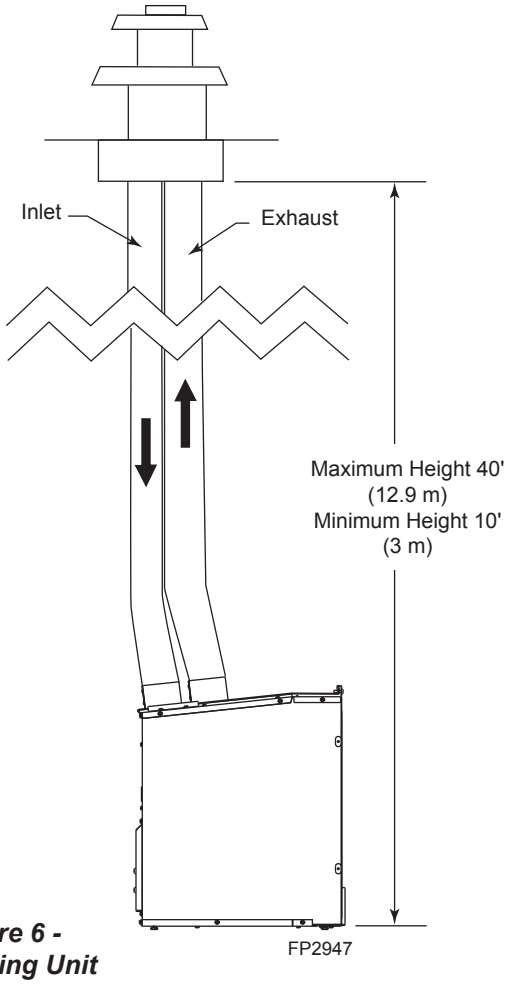


Figure 6 - Venting Unit

ALTITUDE CONSIDERATIONS

This heater has been tested at altitudes ranging from sea level to 4,500 feet (1,370 m). In this testing, heater with standard orifice burns correctly with just an air shutter adjustment. If you need to resize orifice for use at high altitude, contact your dealer.

WARNING

Failure to adjust air shutter properly may lead to improper combustion which can create a safety hazard. Consult your dealer or installer if you suspect an improperly adjusted air shutter.

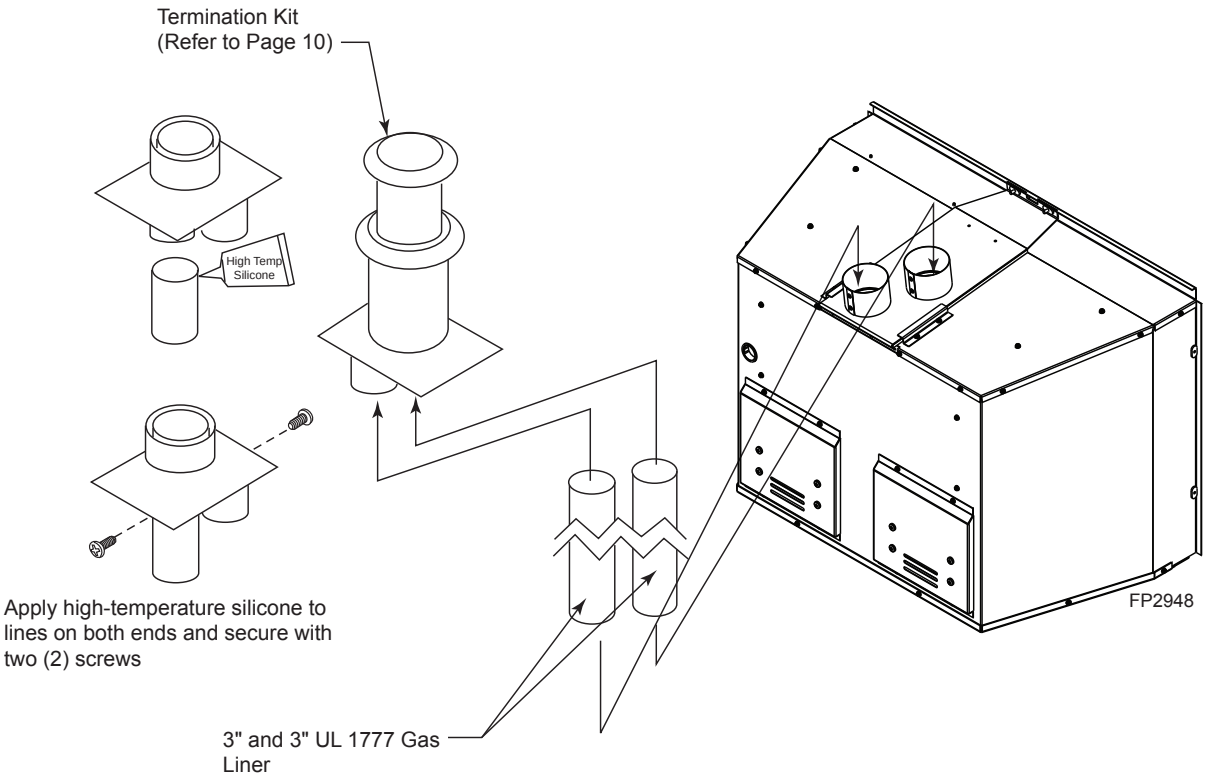

Termination Kit
(Refer to Page 10)
High Temp Silicone
Apply high-temperature silicone to lines on both ends and secure with two (2) screws
3" and 3" UL 1777 Gas Liner
FP2948

Figure 7 -
Connecting Vent Pipe to Heater

VENTING CONFIGURATIONS

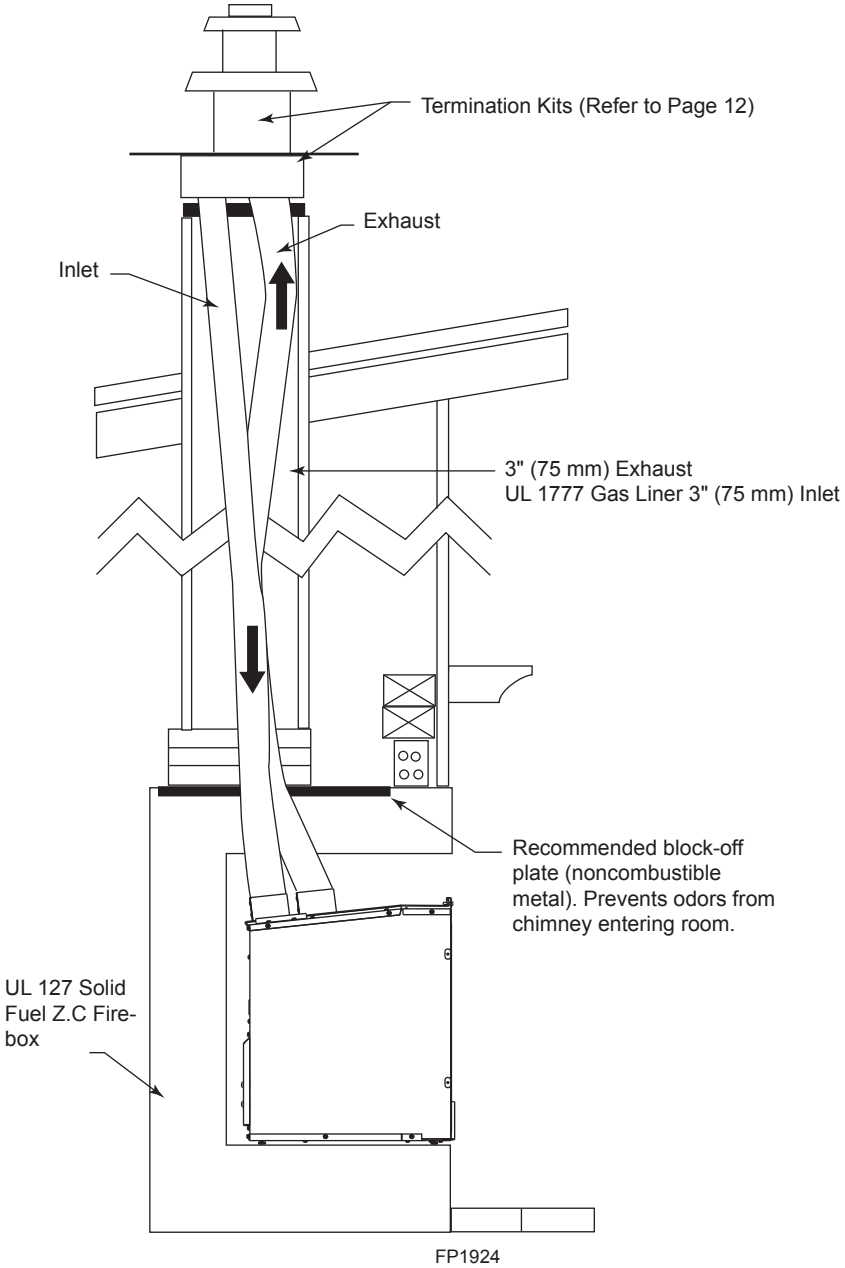

Termination Kits (Refer to Page 12)
Exhaust
Inlet
3" (75 mm) Exhaust
UL 1777 Gas Liner 3" (75 mm) Inlet
Recommended block-off plate (noncombustible metal). Prevents odors from chimney entering room.
UL 127 Solid Fuel Z.C Fire-box
FP1924

Figure 8 -
Inlet and Exhaust Reline

NOTE: You may use either reline configuration with a masonry or zero-clearance fireplace.

INTAKE/EXHAUST MANIFOLD REMOVAL AND VENT INSTALLATION

The intake/exhaust manifold is shipped attached to insert. It may be removed to allow tight installation.

1. Unfasten the two (2) machine screws on the face of the unit and release the plate assembly by sliding the plate back.
2. Attach the exhaust and the intake flex pipes to the collar on the plates with a hose clamp (not provided) or other approved methods (check local codes).
3. Re-attach exhaust baffle and manifold assembly in reverse order of Step 1.

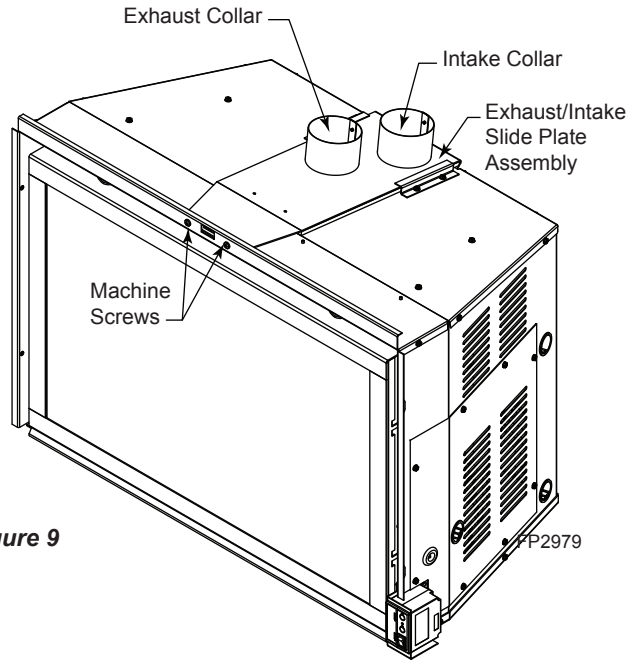


Figure 9

The unit is shipped from the factory as a natural gas unit with the baffle installed. The baffle should be sufficient for venting up to 20 feet (6 m) off the top of the unit. An extra baffle plate is shipped with the unit for installations 20 feet and above. Adjust the plate to the closed position as desired. *Figure 10*

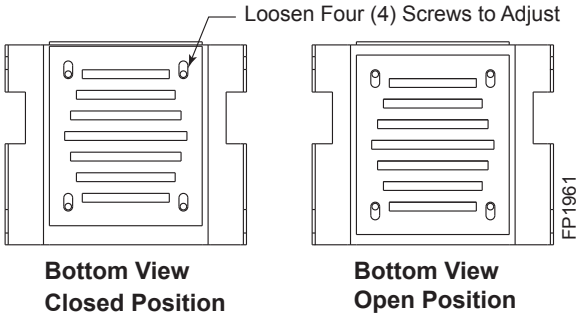


Figure 10 -
Baffle Assembly and Adjustment

CHECK GAS TYPE

Use proper gas type for the insert you are installing. If you have conflicting gas type, do not install insert. See dealer where you purchased the insert for proper insert according to your gas type.

INSTALL GAS PIPING TO INSERT LOCATION

WARNING

A qualified installer or service person must connect appliance to gas supply. Follow all local codes.

CAUTION

For propane/LP units, never connect insert directly to the propane/LP supply. This burner system requires an external regulator (not supplied). Install the external regulator between the burner system and propane/LP supply.

INSTALLATION ITEMS NEEDED

Make sure you have the items listed below before installing appliance.

- External regulator (supplied by installer)
- Piping (check local codes)
- Test gauge connection*
- Sealant (resistant to propane/LP gas)
- Sediment trap (optional but recommended)
- Tee joint
- Pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes — not provided)

* A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the CSA design-certified equipment shutoff valve from your dealer.

For propane/LP connections only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 13 inches of water. If you do not reduce incoming gas pressure, burner system regulator damage could occur. Install external regulator with the vent pointing down as shown in *Figure 11*. Pointing the vent down protects it from freezing rain or sleet.

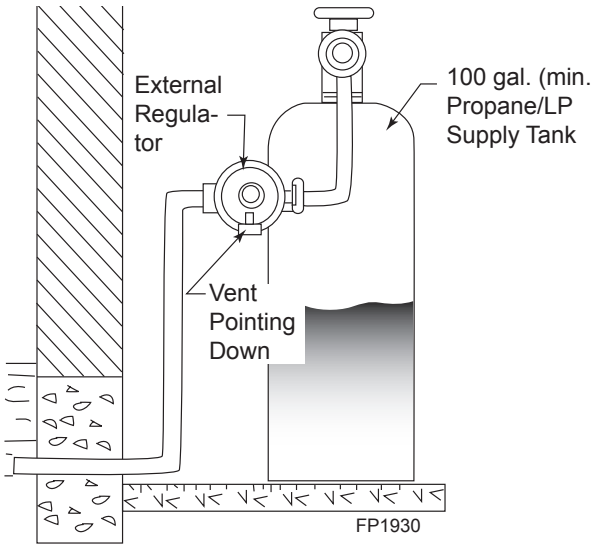


Figure 11 -
External Regulator with Vent Pointing Down (Propane/LP Only)

CAUTION

Use only new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Gas Code, Section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (listed on data plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.

WARNING **Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.**

CAUTION **A manual shut-off valve is factory installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance.** *Figure 12*

NOTE : The gas line connection may be made using 1/2" rigid tubing or an approved flex connector. Since some municipalities have additional local codes it is always best to consult your local authorities and the current edition of the National Fuel Gas Code ANSI.Z223.1, NFPA54. In Canada CSA-B149 (1 or 2) Installation Code.

A listed manual shutoff is factory installed upstream of appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 12*

IMPORTANT: The main gas valve is for turning on or shutting off the gas to the insert.

Check your building codes for any special requirements for locating equipment shutoff valve to inserts.

CAUTION **Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.**

Apply pipe joint sealant lightly to threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged burner system valves.

We recommend that you install a sediment trap/drip leg in supply line as shown in *Figure 12*. Locate sediment trap/drip leg where it is within reach for cleaning. Install in piping system between fuel supply and burner system. Locate sediment trap/drip leg where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into the burner system gas controls. If sediment trap/drip leg is not installed or is installed wrong, burner system may not run properly.

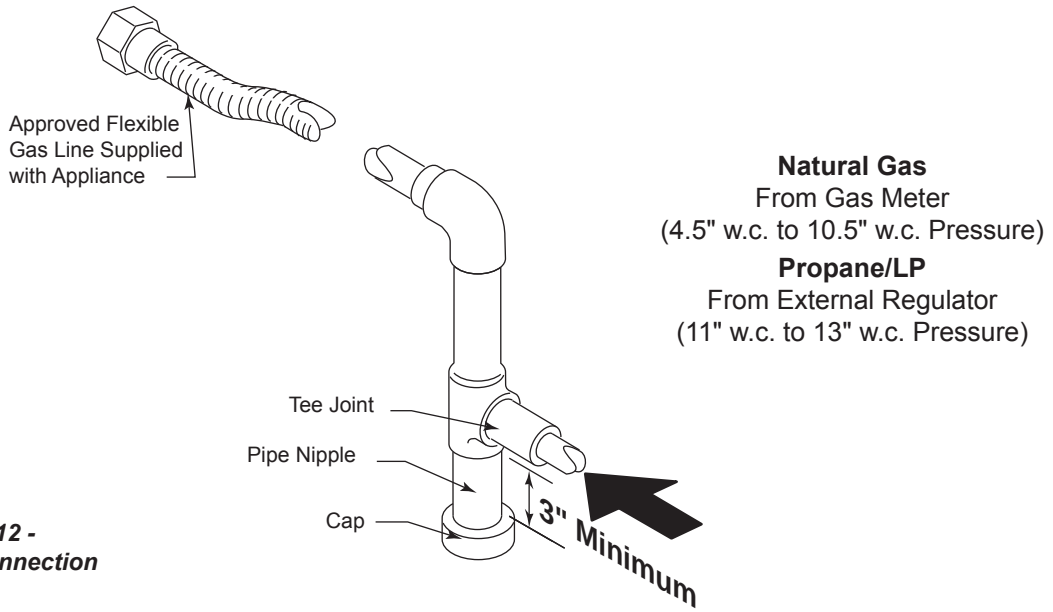


Figure 12 - Gas Connection

1. Check gas type. The gas supply must be the same as stated on the appliance's rating decal. If the gas supply is different from the fireplace, **STOP!** Do not install the appliance. Contact your dealer immediately.
2. To ease installation, a 24" (610 mm) flex line with manual shut-off valve has been provided with on this appliance. Install and attach 1/2" gas line onto shut-off valve.
3. After completing gas line connection, purge air from gas line and test all gas joints from the gas meter to the fireplace for leaks. Use a solution of 50/50 water and soap solution or a gas sniffer.
4. To check gas pressures at valve, turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point. Turn unit to high. *Figure 13.* After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check test points for gas leaks.

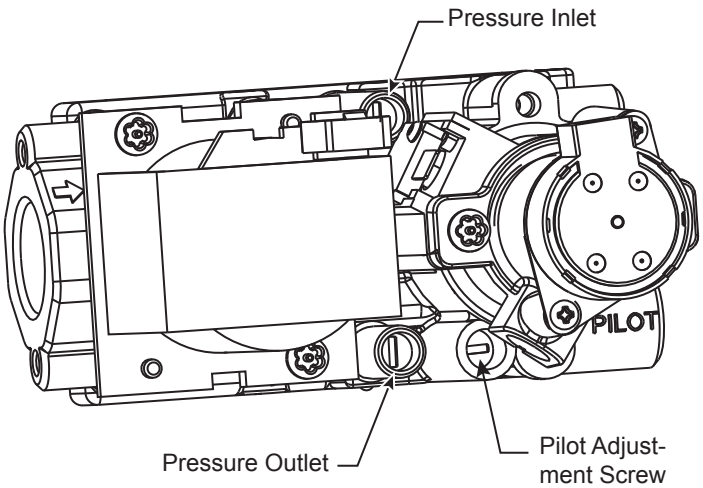


Figure 13 -
Signature Command Valve

WARNING

Do not use open flame to check for gas leaks.

ELECTRICAL WIRING

This insert will work without any electrical supply. Electricity is only needed to operate blower.

Verify proper operation after servicing.

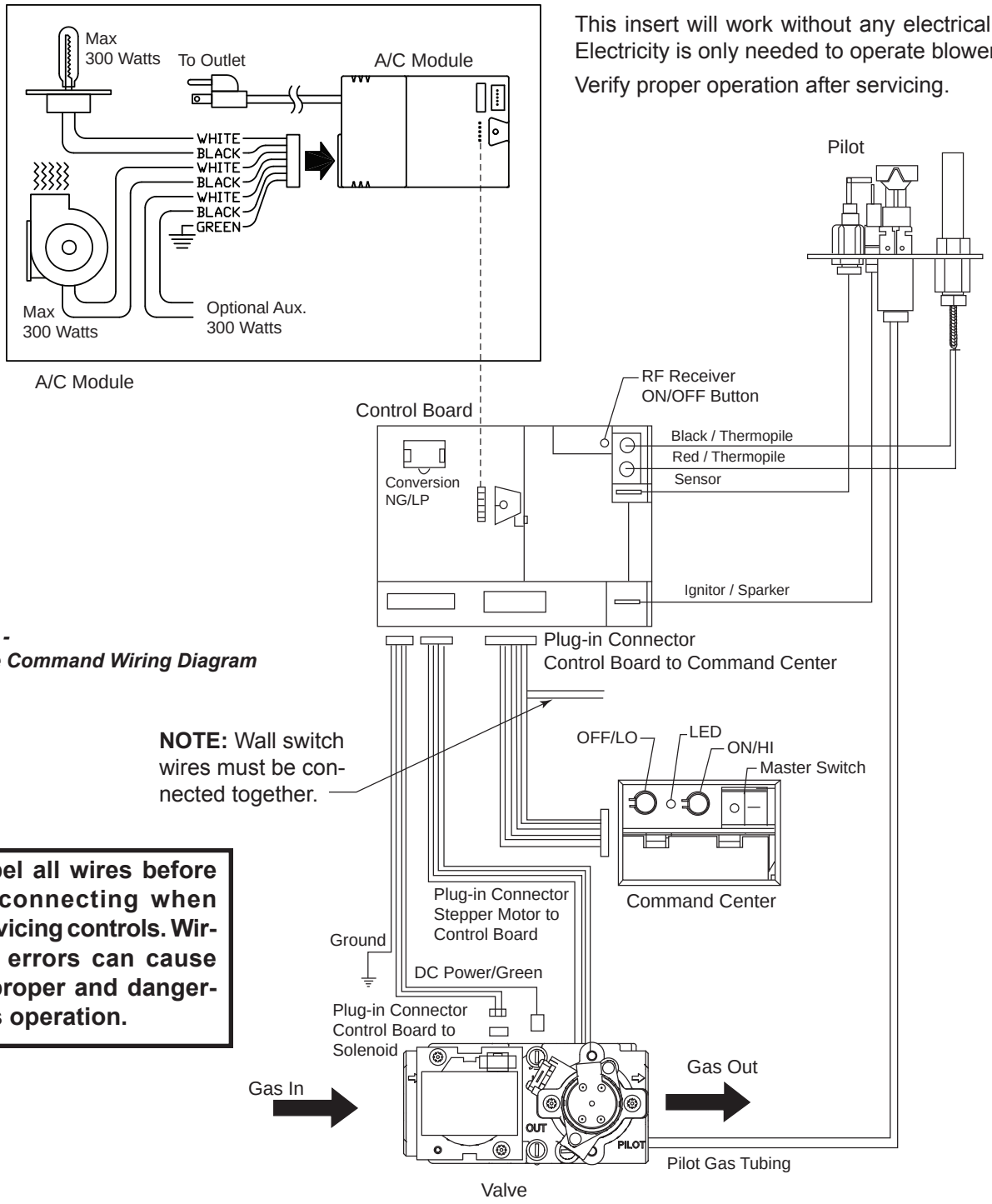


Figure 14 -
Signature Command Wiring Diagram

CAUTION

Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.

WARNING

Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service. All wiring shall be in compliance with all local, city and state codes. The appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the *National Electrical Code ANSI/NFPA 70 (latest edition)* and *Canadian Electrical Code, CSA C22.1*.

Before you begin - This unit is supplied with six (6) ceramic fiber logs. Do not handle these logs with your bare hands. **Always wear gloves to prevent skin irritation from ceramic fibers.** After handling the logs, wash your hands gently with soap and water to remove any traces of fibers.

WARNING

The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones or vermiculite to the heater. Only use the logs supplied with the unit.

Failure to position the parts in accordance with diagrams below or to use only parts specifically approved for this heater may result in property damage or personal injury.

INSTALL LOGS AND ROCK WOOL (EMBER MATERIAL) IN FIREBOX

1. Break up rock wool (ember material) into small fluffy pieces. Place evenly as shown. Do not exceed 1" layer covering all round burner ports. *Refer to Figures 15 and 16.*
2. Apply a light layer of embers to the ports. **NOTE:** Excessive amount of embers will affect the flame and the flame appearance.

WARNING

Do not use the entire bag of rock wool to cover burner area.

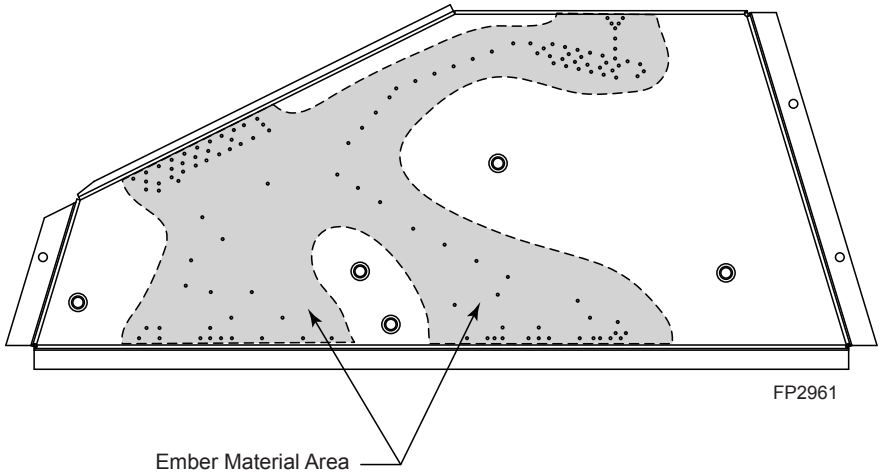


Figure 15 - Ember Material Area

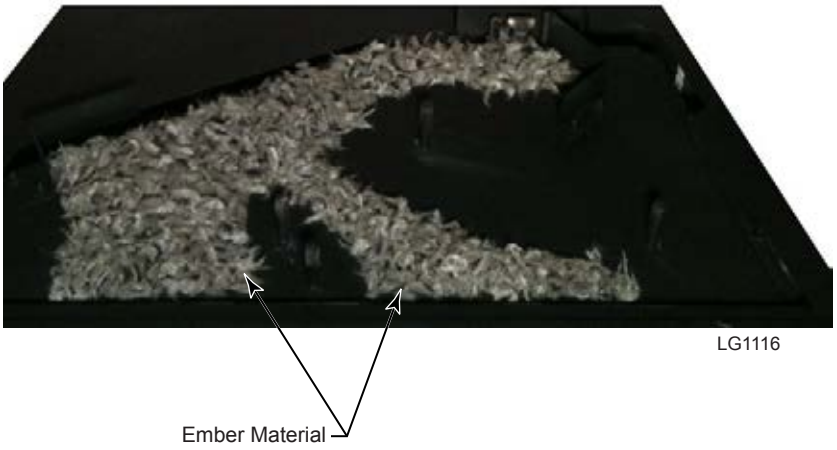
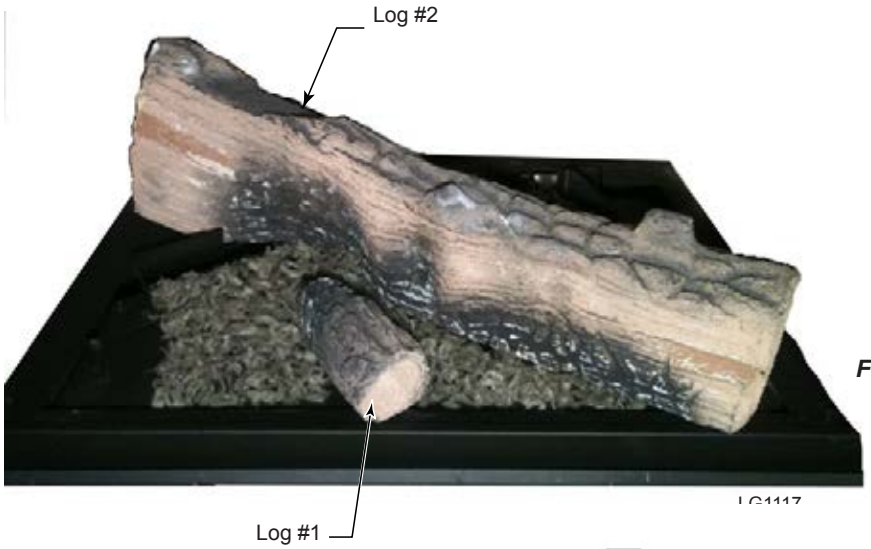


Figure 16 - Place Ember Material



3. Align the two pin holes on Log #1 onto the burner. *Figure 17*
4. Place log #2 by aligning the holes to the burner pin. *Figure 17*

Figure 17

5. Position log #3 so that it is resting on log #2. *Figure 18*

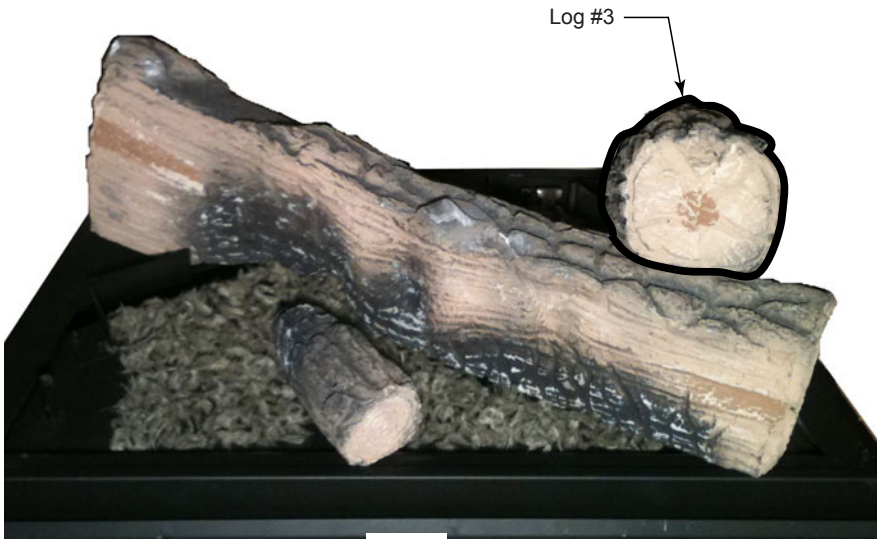


Figure 18

6. Position log #4 so that the bottom right end is resting on the pad on log #3 and the left end is resting on the flat spot on log #2. *Figure 19*

Figure 19

7. Align log #5 hole to the burner pin and rest on log #2. *Figure 20*

LG1120

Figure 20

8. Align the cutout on the bottom of log #6 and fit it into log #5. *Figure 21*

LG1121

Figure 21

DECORATIVE GLASS & STONE INSTALLATION

Use caution when handling glass.

1. Remove glass frame using the cam tool supplied with unit.

NOTE: The unit is designed to use 2/3 of the glass provided. The remaining decorative glass is intended for future use.

2. Mix the two (2) bags of decorative glass provided in the kit as desired. Lay glass on top of burner and cover burner area with one (1) layer. Glass may be used around the perimeter next to the wall. Make sure glass is not blocking gaps between perimeter bracket and the burner. Keep glass behind retaining flange. *Figure 22*
3. Place stones on glass randomly as desired. *Figure 22*
4. Replace glass frame assembly.

Installation is complete.

Figure 22

INSTALL SURROUND

1. Remove glass door assembly. *Page 36, Figure 44*
2. Align cast or beveled surround holes with insert and attach with screws provided.
3. Re-attach glass door assembly.
4. Attach filigree to face by gently pushing into place.

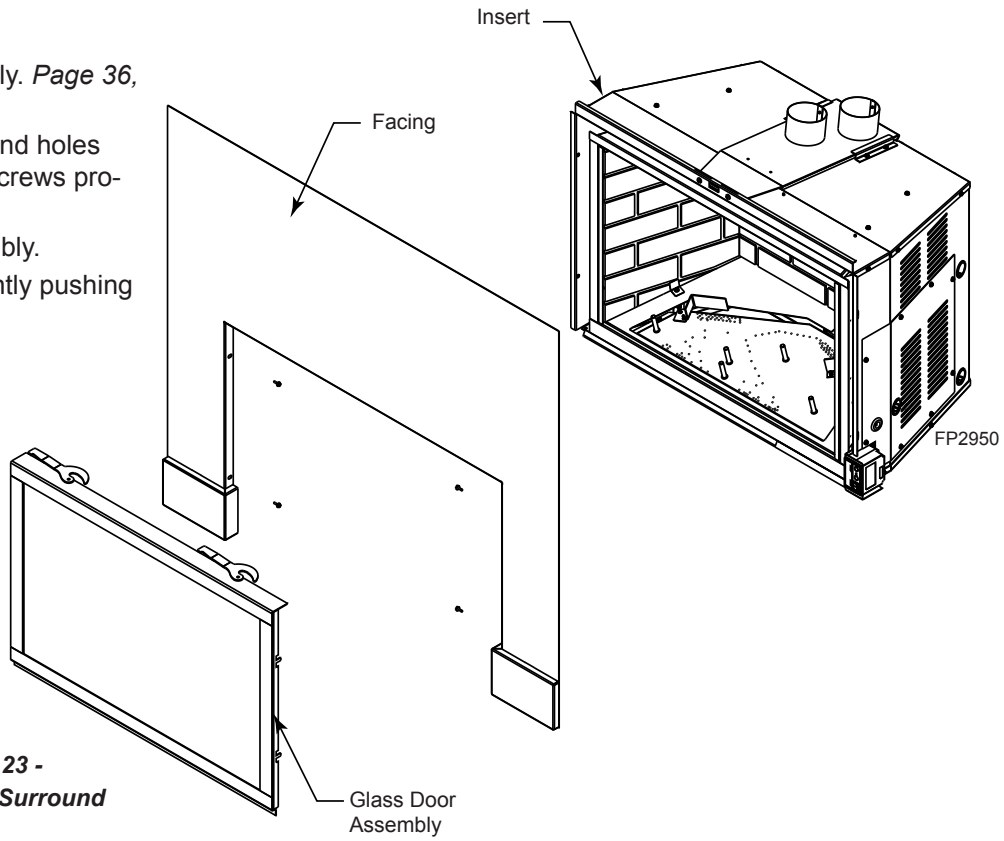


Figure 23 - Install Surround

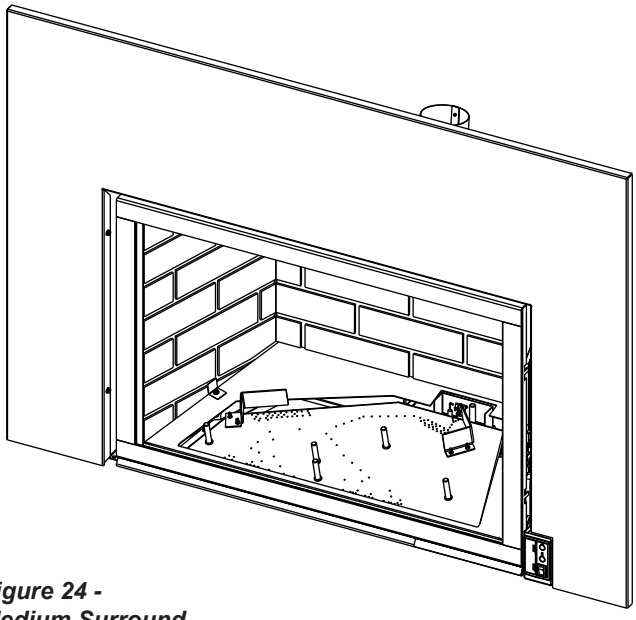


Figure 24 - Medium Surround

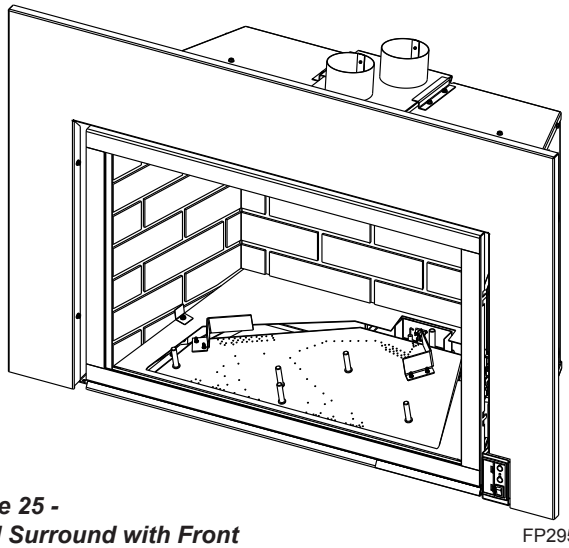
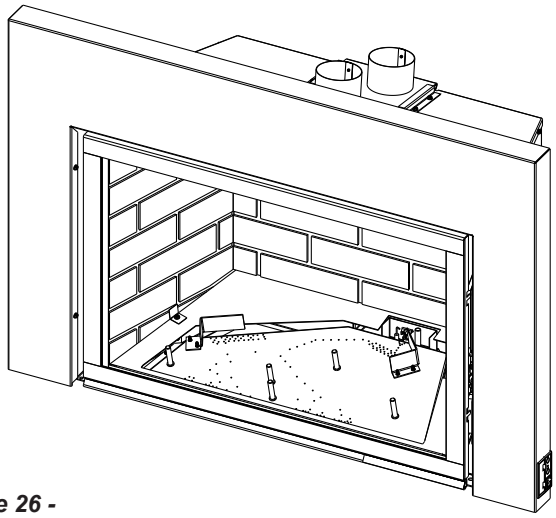
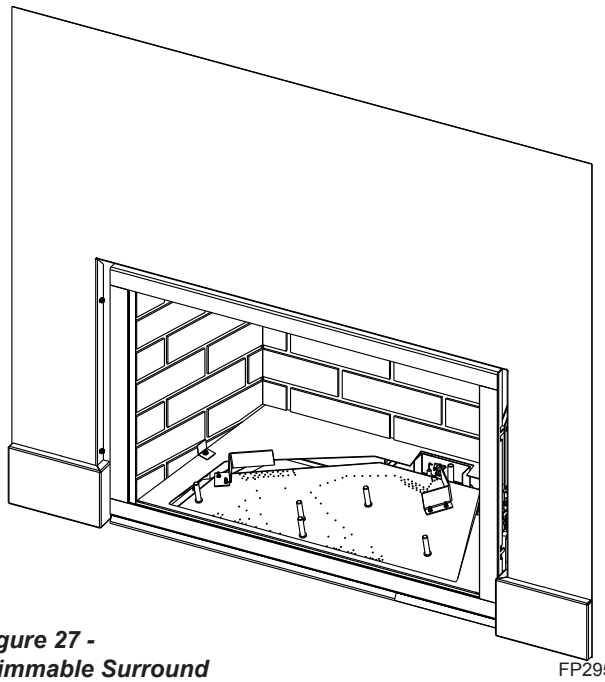


Figure 25 - Small Surround with Front Control Access



FP2953

Figure 26 - Small Surround with Side Control Access



FP2954

Figure 27 - Trimmable Surround

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING

If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of lie.

A. This appliance is equipped with an ignition device which automatically lights the pilot. Refer to the instructions.

B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

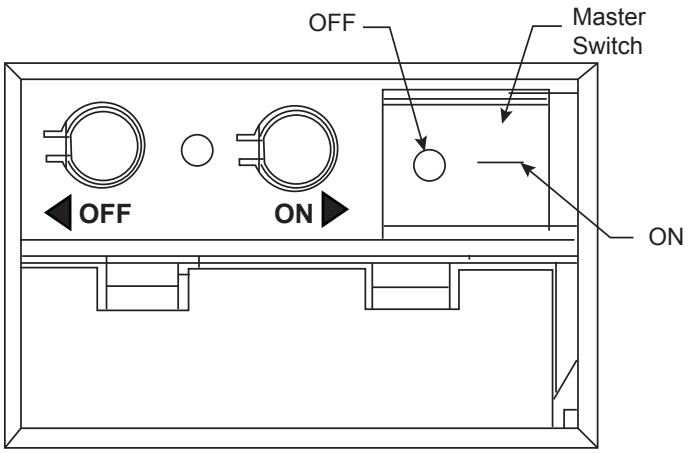
- Do not attempt to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. Use only your finger to push in the master switch. Never use tools. If the switch will not function by hand, do not try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.

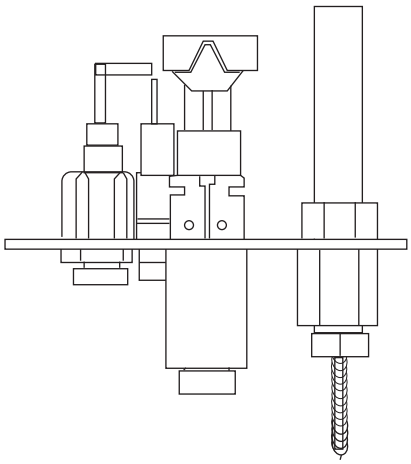
D. Do not use this appliance if any part of it has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

OPERATING INSTRUCTIONS

1. **STOP!** Read the safety information above.
2. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
3. With five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information on Page 24. If you do not smell gas, go to next step.
4. Press the master switch to the "ON" (-) position. Within eight (8) seconds it will beep once. This indicates the system is ready.
5. Press "ON " button. Sparker will spark and pilot flame will light.
6. Once pilot flame is established, the main burner flame will light automatically.
7. If the pilot will not stay lit after several tries, turn the master switch to "OFF" and call your service technician or gas supplier.



Command Center



TO TURN OFF GAS TO APPLIANCE

1. Turn master switch to "OFF".
2. Turn off all electrical power to the appliance if service is to be performed.

FEATURES

Command Center

- Easy Access Function Operation and System Configuration
- Operation Confirmation/Fault Diagnostic Indications (LED/ Buzzer)
- ON/OFF/HI/Med/Low Operation
- Optional Wall Mounting

Control Board

- Electronic Ignition
- Pilot Lockout safety feature
- Electric Power Regeneration from Thermopile to save battery
- 6-hour Automatic Shut Down Option
- Convenient NG/LP Gas Type Conversion
- Standing Pilot/Intermittent pilot Conversion
- Previous settings Restoration Ability (Memory Off)
- Uninterrupted Operation During Power Outage (Automatic Battery Backup)
- ON/OFF RF Remote Receiver
- Optional Transmitter Learn Capability

AC Module Board (Requires TSFSC Remote)

- Easy Snap-on Design
- Embedded Compact 120 VAC Adapter with Auto Battery Back up Feature
- Remote Controlled 3-step Blower, Lighting, and On/Off Auxiliary AC Outputs

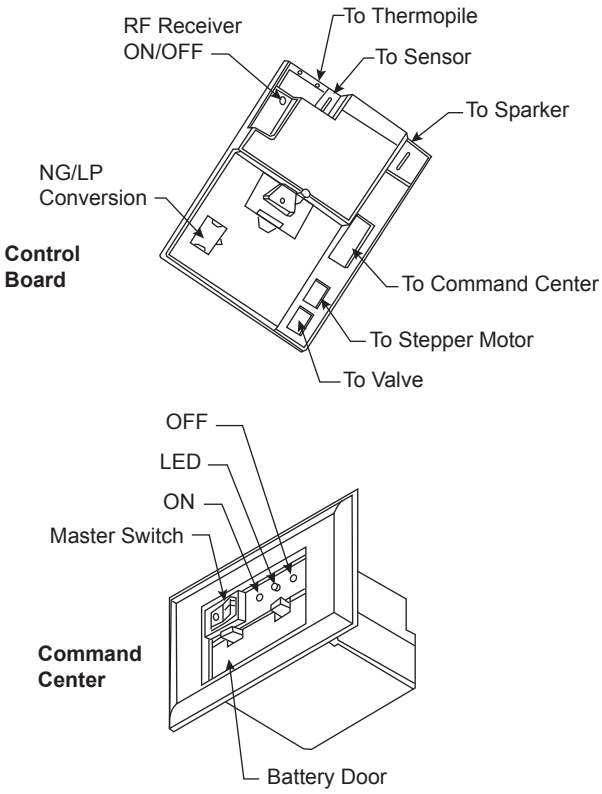


Figure 28 -
Signature Command System Components

Transmitter (Optional)

	TSFSC
Three Flame Height Settings	X
Low battery Indication for Transmitter	X
Child Proof Lock-out	X
LCD Backlight	X
Security Codes 16	X
Countdown 6 hr Timer	X
Standard Thermostatic Control Mode	X
Smart Mode® Thermostat (Auto Flame & Blower Modulation)	X
Three Brightness Settings for Lights	X
Three Speed Control for Blower	X
On/Off Auxiliary	X
Programmable Timer to turn blower on and off	X

BATTERY INSTALLATION

The Command Center uses four (4) "AA" batteries as back up for power outages. The system can operate for approximately six (6) months on battery power.

To Install Batteries (not included):

1. Press down the battery door tabs and pull out to remove battery door.
2. Install the batteries as indicated on Command Center.
3. Close battery door by snapping in place.
4. When the four (4) batteries are installed the system will operate without power.
5. The batteries should be replaced when the LED indicates low battery or at least once a year.

SYSTEM CONFIGURATION/SETUP

All System configuration/setup is done on the Command Center.

NOTE: When using On/Off wall switch, the switch must be in the ON position to perform all configuration set ups at the command center.

Intermittent/Standing Pilot Setup (Default intermittent)

1. Holding the ON button on the Command Center while turning on the master switch will toggle between standing pilot and intermittent pilot.
2. After the above operation, one beep (for standing pilot) or two beeps (for intermittent pilot) will be given as confirmation.

Six-hour Safety Shutdown Option (Default ON)

1. The system comes preset from the factory with a six (6) hour shutdown from its last command of operation. This is done to prevent the fireplace from continuing to operate if unattended. You may disable this feature if you wish.

NOTE: By disabling this feature, your fireplace may continue to operate unattended.

2. When the master switch is in the ON position ("-"), pressing the ON button and the OFF button on the Command Center simultaneously will toggle between enabling and disabling the six-hour shutdown option.
3. After the above operation, one beep (for enabling the six-hour shutdown option) or two beeps (for disabling the six-hour shutdown option) will be given as confirmation.

Remote Transmitter Learn Function (Default OFF)

1. The RF receiver button located on the Control Board must be in the on position before the learn function can begin. Use paper clip to depress button. One beep for RF receiver ON or two beeps for RF receiver OFF will be given as confirmation.
2. After the RF receiver is on, holding the OFF button on the Command Center while turning on the master switch will activate the learn function for the transmitter.
3. After the above operation, two beeps will be given and the green LED on the Command Center will flash for 10 seconds.
4. During the 10 seconds, press the OFF button on a transmitter to learn. Another two beeps will be given to confirm a successful learning. Refer to transmitter instructions for remote operations.

Shutting Off the Standing Pilot (Temporary Shut Off)

To shut off the standing pilot for service or summer shut down, press and hold the ON button on the Command Center for 3 seconds when the master switch is in the ON position ("-") and the main burner is off.

Note: Pilot will resume the next time system is turned on.

Key Combinations for System Settings

NOTE: When On/Off wall switch is used, it must be in the On position to perform all system setups.

Function	Operation	Default Setting
Intermittent/Standing Pilot Setup	Hold the ON ▲ button while turning on the master switch (Beep once for standing pilot, twice for intermittent pilot)	Intermittent Pilot
Standing Pilot Temp. Shutoff	Hold the ON ▲ button 3 seconds (when the master switch on the main burner is off)	
RF Remote Receiver On/Off	Push the RF receiver On/Off button on the control board Beep once for ON and beep twice for OFF	RF OFF
Learn Remote Transmitter	Hold the OFF ▼ button while turning on the master switch (Beep twice then press any handheld remote button)	
6-hour safety shutdown setup	Press the ON ▲ button and OFF ▼ button simultaneously (Beep once for ON, twice for OFF)	ON

FUNCTIONS/OPERATION (with Command Center)

Turning on the fireplace

1. Turn on the master switch and wait for a beep.
2. Press the ON button on the Command Center or turn on wall switch. Pilot will light and burner will come on High setting or last memory setting (See Turning Off Fireplace below). For memory feature.

Pilot Safety Lockout Function

1. If the pilot doesn't light after sparking for 30 seconds, pilot trial lockout happens. The LED on the Command Center flashes Green once every 2 seconds, until reset.
2. If the pilot flame is lost during normal operation, the system will try three (3) times to relight after three (3) failures, flame loss lockout happens. The LED on the Command Center flashes Red-Green once every 2 seconds, until reset.
3. Turning the master switch on the Command Center to the off position, then ON again will reset the system.

Flame Height Control

1. Press the ON button (on the Command Center) once to turn on the main burner with maximum flame height.
2. Press the OFF button to decrease flame height. The first two presses will decrease the flame height to medium and low.
3. The third press on OFF will turn off the main burner. In standing pilot configuration, the pilot will stay; in intermittent pilot configuration, the pilot will be shut off.

Turning the Fireplace Off

There are three ways to turn the fireplace off.

1. Flip the master switch to the off ("O") position. (This will turn the entire system OFF.)
2. Press the OFF button to Medium, Low, then Off.
3. Hold the OFF button anytime for three seconds or by turning off the wall switch. These two commands of OFF are (Memory Off) the system will remember all last settings before turning off. The next time the fireplace is turned on, all settings will resume. To reset, change to the desired settings and shut off by using the Memory Off commands and the system will be reset to those new settings.

Command Center Operations:

The following functions are available on the Command Center.

Function	Operation
Power Up	Flip the master switch to the ON ("_") position to power up the system
Fireplace ON	Press the ON ▲ button on the Command Center or turn on wall switch to turn the fireplace on
Fireplace OFF	Flip the master switch to the OFF ("o") position OR press the OFF ▼ button 3 times OR for Memory Off, hold the OFF ▼ button 3 seconds, or turn off wall switch
Flame Height Up	Press the ON ▲ button once to turn on the fireplace with maximum flame height
Flame Height Down	Press the OFF ▼ button to lower the flame height to Medium and Low

Self Diagnostics Chart:

The Command Center has a self-diagnostic LED enabling you to troubleshoot problems and potentially avoid a service call. Please refer to the charts below for indicator reference.

Fault	LED Indication
Conversion Cover Missing	One RED (1 time)
Spark Fail	Two RED (1 time)
No Sensor Signal	Three RED (1 time)
Pilot Lockout - trial	One GREEN, every 2 sec. (until manual reset)
Pilot Lockout - flame loss	One RED-GREEN, every 2 sec. (until manual reset)
Low Battery	One RED, every 10s (continuously)
No or Low Thermopile Power	Two RED, every 10s (continuously)
Learning	GREEN Flashes, every 1 sec. (for 10 sec.)
AC Power On	GREEN solid
Pressure Switch Failed (Power Vent only)	One RED every 2 sec. (until manual reset)

NOTE

Due to the sensitive temperature monitoring components in the transmitter, it is necessary to allow the transmitter to stabilize to room temperature before accurate room temperatures are displayed. If the transmitter is activated from a severe cold condition, allow 15 minutes for accurate temperature readings to appear on the LCD display.

WARNING

Turn appliance OFF (at the Master Switch) if you are away from your house for an extended period of time. Never leave anything on top of the surface of the transmitter.

■ Function Areas of the LCD Display

Figure 29 shows the display of the TSFSC LCD.

Information Bar

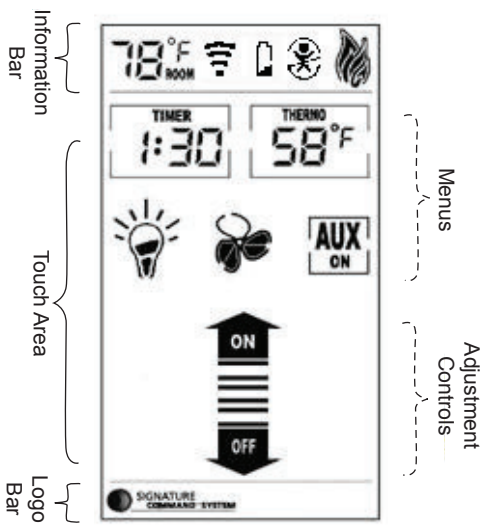
The information bar shows the room temperature, the "sending signal" radio icon, the low battery indication icon, the child-proof icon, and the flame icon. This area doesn't have touch buttons.

- The room temperature will always be shown after power-up. It displays the room temperature from 40 °F to 99 °F. "Lo" and "HI" will be displayed when the room temperature is lower than 40°F or higher than 99°F, respectively.
- The radio icon will be shown when the transmitter is sending a signal.
- The low battery indication icon will be shown when the battery voltage is low.
- The child-proof icon will be shown when the child-proof mode is activated.
- The flame icon indicates the current flame height - Off, Low, Medium and High

Touch Area

The touch area contains all touch buttons to control the transmitter. It consists of two categories: menus and adjustment arrows. The blue LED backlight lights up for 8 seconds when any of the touch buttons is pressed.

- The menus include TIMER, THERMO, LIGHT, FAN and AUX.
- The adjustment arrows include ON/up and OFF/down. Their default function is to adjust the flame height. When a button from the menu is pressed, the ON/up and OFF/down buttons will temporarily become adjustment controls for the selected item. When the adjustment is done, the ON/up and OFF/down buttons go back to flame height controller again.



Function Areas of the LCD Display ***Figure 29***

Logo Bar

The Logo Bar contains the brand logo: Signature Command System.

■ Initialization and Setting up

Installing Batteries:
Figure 30

The remote transmitter has two battery compartments, one on each end of the transmitter. **Always change all four (4) batteries at the same time.**

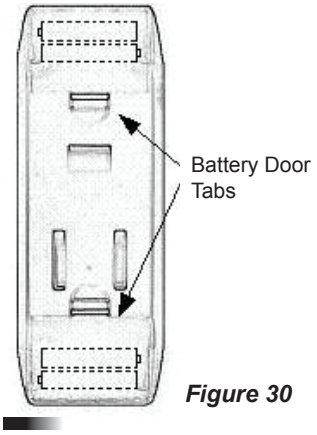


Figure 30

To install batteries,

1. Press down the battery door tab and pull out to remove the battery door.
2. Install the batteries as indicated inside the battery compartments.
3. Close the battery door by snapping in place.
4. When all **four** batteries are installed, the transmitter will initialize for 5 seconds and then is ready for use.
5. The batteries should be replaced every 12 months or when the low battery icon indicator is displayed.

Changing Temperature Unit

When batteries are installed in the transmitter,

1. All available icons on the LCD will be turned on then be cleared.
2. The LCD will display temperature unit: °F. Use ON Δ to toggle the units between °F and °C within the first 5 seconds.
3. The transmitter enters Manual Mode
4. The LCD displays room temperature with the chosen unit.

Setting Privacy Code on Transmitter:
Figure 31

The remote transmitter privacy code is preset in factory. In the event of activation or interference from other nearby transmissions, change the code using the following procedures (learn function must be performed after changing the code):

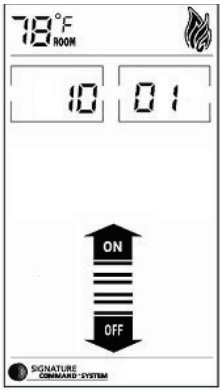
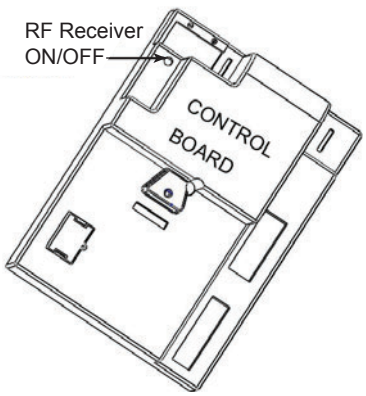


Figure 31

1. Press the ON/arrow button and the TIMER button at the same time to enter privacy code setup mode.
2. The setup display is shown in the figure. The four digits on the top stand for the privacy code (as the actual DIP switches on Ambient's previous remotes). The default values of the four digits will be all "1" (ON).
3. The first digit will be flashing upon entering the setup mode. Push the ON button to toggle its value between "0" (OFF) and "1"(ON), and push the "OFF" button to jump to the next digit. The next digit will then start flashing and the first one stops flashing. Set up the four digits to your choice.
4. After setting up all the four digits, push "OFF" to finish the process and return to the previous mode.
5. The Signature Command control board then needs to re-learn the new setting.

Performing Learn Function

1. The RF receiver button on the control board in the fireplace must be in the on position before the learn function can begin. *Figure 32* With the Command Center master switch in the ON position, use paper clip to depress the recessed button on Control Board, one beep for RF receiver ON or two beeps for RF receiver OFF.
2. Holding the OFF button on the Command Center while turning on the master switch will activate the learn function for the transmitter.
3. After the above operation, two beeps will be given and the green LED on the Command Center will flash for 10 seconds.



Control Board

Figure 32

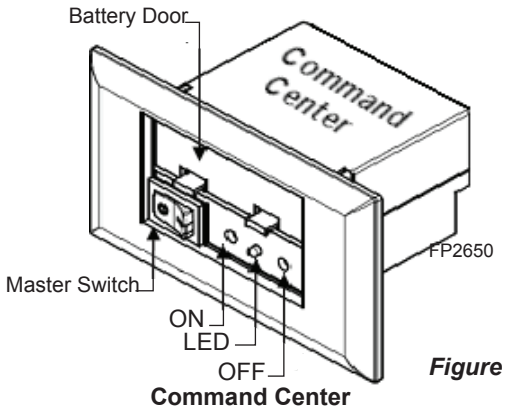


Figure 33

Command Center

4. During the 10 seconds, press the OFF button on the transmitter to learn. Another two beeps will be given to confirm a successful learning. *Figure 33*

WARNING **Do not use two (2) or more remote control systems in the same area with the same privacy code setting, as they will communicate with each other. This may cause the appliances to malfunction.**

Resetting the transmitter:

If the transmitter is not working properly, reinstall the batteries to reset the transmitter.

1. Pull out at least one of the batteries.
2. Press any key on the screen to discharge.
3. Wait for 10 seconds and reinstall the batteries.

Pushing and holding any key for more than 10 seconds until the display refreshes will also reset the transmitter.

■ Functions and Operations

General:

The TSFSC Remote Control has four (4) operating modes: Manual, Timer, Thermostatic and Smart Mode® thermostat. The control system can be set to temperature range between 45° F and 90° F. The blower speed and flame height can be adjusted in the manual, timer and thermostatic mode. The Smart Mode® thermostat will automatically adjust flame height and blower speed according to the difference between Set and Room temperatures.

The transmitter will operate the remote receiver from 1 foot to a maximum of 30 feet. The distance is reduced when batteries are low.

Manual Mode
Figure 34

In this mode, the TIMER button and the THERMO button will only display "TIMER" and "THERMO", respectively without showing the time and the SET temperature. Pressing the ON/up and OFF/down buttons will change the flame height if none of the menu buttons (TIMER, THERMO, LIGHT, FAN, AUX) are pressed and flashing.

1. Press the ON/up button to turn on the fireplace. The flame icon on the LCD displays High.
2. Press the OFF/down button to decrease the flame height and turn off the fireplace. When the OFF/down button is pressed for three times, the flame icon changes form High to Medium, to Low, then to Off.
3. If the OFF button is held for more than 3 seconds at any flame height, the fireplace will be turned off and the flame icon disappears.

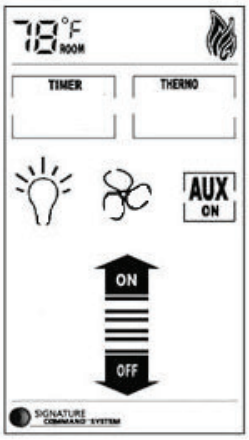


Figure 34

4. Sliding up and down on the arrow buttons can also turn on or turn off the fireplace.
5. If the fireplace is shut off using the above methods in 3 and 4, all the settings will be remembered and will be resumed next time the fireplace is turned on (Memory Off).

Timer Mode

Figure 35

Press the TIMER button to enter timer mode. The fireplace will stay on for a period of time as specified by the timer and then be shut off by the transmitter when the timer counts down to zero.

1. When the TIMER button is pressed, the Set Time appears in the frame of the button and flashes.
2. Use ON/up and OFF/down to increase or decrease the Set Time in 15 min. increments, between 0:00 to 6:00. Sliding up and down on the arrow buttons will increase or decrease the Set Time in 1 hour increments.
3. Push the TIMER button again to confirm the Set Time, the transmitter sends an ON signal to turn on the fireplace.
4. The flashing stops and the ON/up and OFF/down buttons become flame height controller again. The flame height will then stay as set up by the ON/up and OFF/down buttons.
5. The TIMER button can be used when the transmitter is in Manual Mode or in Thermostat Mode. In both modes, the fireplace will be shut down completely when the timer counts down to zero.
6. To exit Timer Mode,
   a. Push and hold the TIMER button for 3 seconds Or
   b. Use the OFF/down buttons to decrease the Set Time to zero Or
   c. Slide down on the arrow buttons to exit TIMER mode and shut off the fireplace.

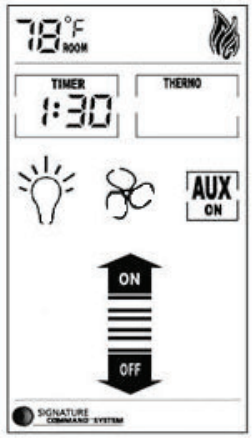


Figure 35

Thermostat Mode

Figure 36

NOTE: The Command Center buttons will disable when thermostat is being used.

Press the THERMO button to set the transmitter in thermostat mode. The transmitter will automatically turn on the fireplace when the room temperature is below the set temperature and turn off the appliance when the room temperature is above the set temperature within one degree.

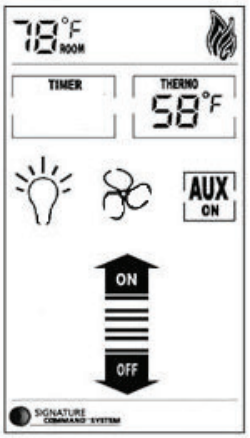


Figure 36

1. When the THERMO button is pressed, the Set temperature appears in the frame of the button and flashes.
2. Use ON/up and OFF/down to increase or decrease the Set temperature in 1 degree increments, between 45 degrees and 90 degrees. Slide up and down on the arrow buttons will increase or decrease the Set Temperature in 10 degrees increments.
3. Press the THERMO button again to confirm the Set Temperature. The transmitter will send out an On signal or an Off signal depending on the relationship between the Set temperature and the Room temperature.
4. The flashing stops and the ON/up and OFF/down buttons become flame height controller again. The flame height will then stay as set up by the ON/up and OFF/down buttons.
5. To exit Thermostat Mode:
   a. push and hold the THERMO buttons for 3 seconds or
   b. slide down on the arrow buttons to exit Thermostat mode and shut off the fireplace.

Smart Mode® Thermostat Option for Thermostat Mode

Figure 37

Press and hold the THERMO button and the ON/UP button at the same time for 3 seconds to toggle between Smart Mode® thermostat and the regular Thermostat Mode. The icon “Smart Mode” will appear under the Set Temperature. The transmitter will automatically adjust the flame height according to the difference between

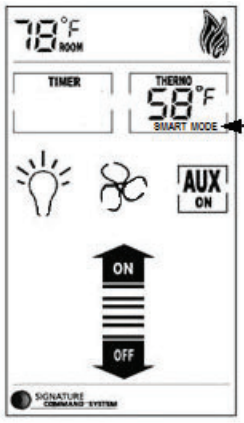


Figure 37

the Set temperature and the Room temperature. There is no manual flame height adjustment. The fan speed will also automatically adjust if turned on.

NOTE: there will a 10 second delay for the flame adjustment when the fireplace is turned on.

1. When Set Temp. is 3° F or higher than Room Temp., flame height will be on High.
2. When Set Temp. is 2° F higher than Room Temp., flame height will be on Medium.
3. When Set Temp. is 1° F higher than Room Temp., flame height will be on Low.
4. When Set Temp. is equal to Room Temp., flame height does not change (stays on low).
5. When Set Temp. is lower than Room Temp., the fireplace will be shut off.
6. When Set Temp. is 1° F higher than Room Temp., again the flame height will be on Low.
7. the fan speed follows the flame height, if the fan is turned on.

To exit Smart Mode® thermostat and shut off the fireplace;

a. push and hold the THERMO buttons for 3 seconds, Or
b. press the OFF button, Or
c. slide down on the arrow buttons.

To shut off the Smart Mode® thermostat option and return to regular thermostat mode, press and hold the THERMO button and the ON/UP button at the same time for 3 seconds again.

Blower Speed Control
Figure 38

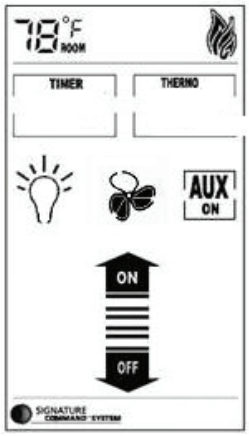


Figure 38

NOTE: Blower will only work with flame on.

The blower speed control function is used to adjust the speed of the blower connected to the Signature Command System. There are four speed levels, Off, Low, Medium, High.

1. Press the FAN button to enter the blower speed control mode. The fan icon will start flashing.
2. Press the ON/up and OFF/down button to increase/decrease the blower speed.
3. Press the fan button again to confirm the speed setting. If the fireplace is on, the blower speed will take effect right away; if the fireplace is off, the receiver will remember this setting and the blower is still off (see blower On Delay and Off Delay in the next section).
4. After the signal is sent, the ON/up and OFF/down buttons become flame height controller again.
5. When the fan button is flashing, slide up and down on the arrow buttons will turn the blower speed to High or Off directly without pressing the fan button again to confirm.
6. If the blower is turned on using the FAN button, the blower speed will adjust automatically when using Smart Mode® thermostat (See Smart Mode® thermostat section).

Blower On Delay Time and Off Delay Time Setup
Figure 39

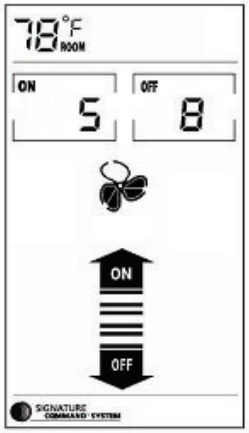


Figure 39

1. Hold the FAN button for 3 seconds until two numbers appear on the LCD screen. The left number is blower On Delay and the right number is blower Off Delay Time.
2. When the first number is flashing, use the ON/up button to set the desired On Delay Time from 0 to 15 min.
3. Press the OFF/down button to jump to the Off Delay Time setup.
4. When the second number is flashing, use the ON/up button again to set the desired Off Delay Time from 0 to 15 min.
5. Press the OFF/down button again to finish the setup and the new settings will be transmitted to the receiver.
6. The default settings are 5 minutes for the On Delay Time and 8 minutes for the Off Delay Time, as shown.

Light Brightness Control
Figure 40

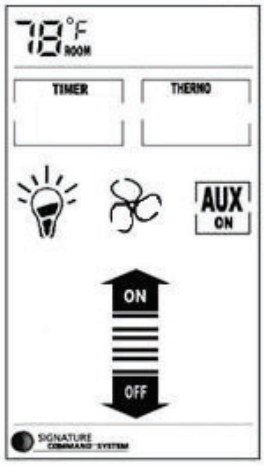


Figure 40

The light brightness control function is used to adjust the brightness of the light bulbs connected to the AC module on the Signature Command System. There are four light brightness levels defined: Off, Low, Medium, High

1. Press the LIGHT button to enter the light brightness control mode. The LIGHT icon will start flashing.
2. Press the On/up and OFF/down buttons to increase/decrease the light brightness (Off-Low-Medium-High).
3. Press the light button again to confirm the setting. The new setting will be transmitted to the receiver.
4. After the signal is sent, the On/up and Off/down buttons become flame height controller again.

5. When the light button is flashing, slide up and down on the arrow buttons will turn the light brightness to HIGH or Off directly without pressing the light button again to confirm

AUX Control (Optional)

The AUX control function is used to turn on or turn off the auxiliary component connected to the AC module of the Signature Command System. Press the AUX button to turn on or turn off the auxiliary.

1. When the auxiliary is turned on, the icon will become solid text and the “ON” icon will appear below the “AUX” icon.
2. When the auxiliary is turned off, the icon will become hollow text and the “ON” icon will disappear.

NOTE: Some fireplaces use the AUX function to control options within the fireplace. Refer to fireplace manual for operation.

Setting up Blank Screen or Constant Display in Idle

Figure 41

There is an option to set up how the LCD displays and functions when the transmitter is in idle. There are two choices:

Figure 41

1. A) Mode. When the transmitter is in idle, the icons in the “touch area” (timer, thermostat, blower, light and AUX) will disappear, as shown in the figure on the left. When any of the touch buttons is pressed, those icons will appear and are ready to operate (default).
2. B) Mode. The transmitter always displays all available icons showing current status of timer, thermostat, blower, light and AUX as shown in the figure on the right.

Press TIMER and THERMO buttons at the same time for 3 seconds to toggle between A) and B).

1. When the current setting is A), touch any place in the touch area to bring up the icons then press TIMER button and THERMO button at the same time for 3 seconds. The backlight will flash once to indicate that the setting has changed to B).
2. When the current setting is B), pressing TIMER button and THERMO button at the same time for 3 seconds will switch to A) Mode. The touch area icons will disappear.

■ Safety Features

1. Low Battery Detection

   When low battery condition occurs, the transmitter will turn off the fireplace.

   A) Battery voltage is checked every one minute. When the battery voltage is low, the LCD displays a low battery icon which will exist in all modes.

   B) The transmitter will not operate with low battery voltage. Change the batteries before the batteries become too weak for normal operations.

2. Power On Initialization

   After the power-on initialization, the transmitter sends a signal to turn off the fireplace.

3. Thermal Shutdown

   When the ambient temperature is more than 99°F, the transmitter will turn off the fireplace.

   A) The LCD will display “HI”.

   B) The Transmitter will not function until the room temperature has dropped below 99 degree Fahrenheit.

4. Low Temperature Condition

   When the ambient temperature is less than 40 degrees Fahrenheit, the LCD will display “LO”, and NO SIGNAL will be sent to turn on the appliance.

   All functions still remain the same for both Manual Mode and Thermostat Mode

5. Child-proof Protection

   The child-proof icon will be shown when the child-proof mode is activated by pressing the ON button and the OFF button at the same time for three seconds.

   A) Enter childproof mode by pressing and holding both the ON button and the OFF button simultaneously for 3 seconds. The Childproof indicator will be shown on the LCD.

   B) Deactivate childproof mode by pressing and holding the ON button and the OFF button simultaneously for 3 seconds again. The Childproof indicator disappears on the LCD.

   C) The transmitter cannot be operated in childproof mode.

■ Using the Mounting Base

The transmitter comes with a mounting base which allows you to hang the transmitter on the wall.

1. Secure the mounting base on the wall with supplied screws. For best viewing angle, make it the same height as your eyes.
2. Hang the transmitter on the hook of the mounting base, then push down so the transmitter is flush to the mounting base.

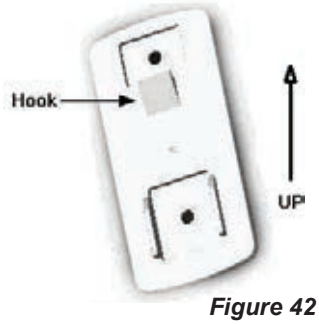


Figure 42

TROUBLESHOOTING

Symptom	Causes	Action
1. Battery icon on LCD on transmitter	1. Low Battery	1. Replace batteries. Change batteries every 6 months.
2. LCD display is blank		2. Check battery installation or replace batteries.
3. LCD display shows “funny” display		3. Reset the transmitter (see “Resetting the Transmitter” section).
4. Appliance does not come on	2. The transmitter did not match with the receiver	1. Make sure the transmitter has learned to the receiver.
	3. Transmitter measures temperature exceeding 99 degrees Fahrenheit and shows “HI” on LCD	1. Move transmitter to a cooler place and wait until temperature drops below 99 degrees.
	4. Distance between the transmitter and receiver is more than 30 feet	1. Make sure the opening distance is less than 30 feet.
5. Blower is not on after the fireplace is turned on	5. Blower setting is off	1. Press FAN key to select Fan speed you desire.
	6. Blower delay setting is set too high	1. Press and hold FAN key to set desired ON/OFF delays. This is done in minutes.

ADJUST THE AIR SHUTTER

The venturi under the burner is equipped with an air shutter. The opening of the venturi has been set at 3/16" for Natural Gas and fully open for Propane installation at sea level. The burner on Natural Gas models may be adjusted for high altitude as follows:

To access the air shutter, remove three (3) screws securing burner to engine base and slide burner to the left or remove from firebox.

- To increase air mixture, loosen the screw to open the shutter more. This will reduce soot formation. *Figure 43*
- To decrease air mixture, loosen the screw to close the shutter. Flames will be more yellow. *Figure 43*

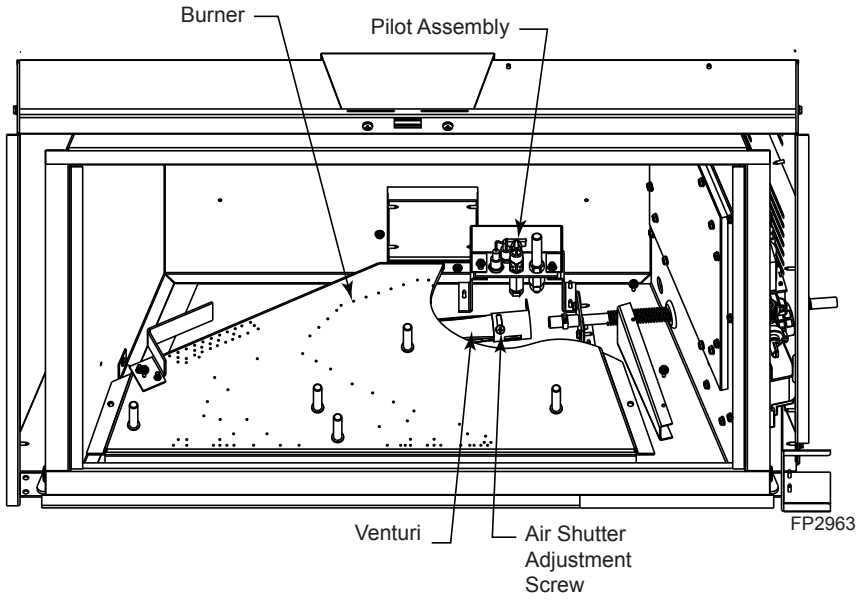


Figure 43 -
Air Shutter Adjustment

CAUTION

Always use gloves when handling broken glass.

WARNING

Make sure the glass panel edges do not touch any metal parts during thermal expansion.

GLASS FRAME REMOVAL

1. Carefully remove upper filigree by pulling straight out.
2. Remove glass frame from insert by releasing two latches on top of insert and lifting the door up and off the unit. *Figure 44*
3. Set glass frame aside.
4. Re-install in reverse order.

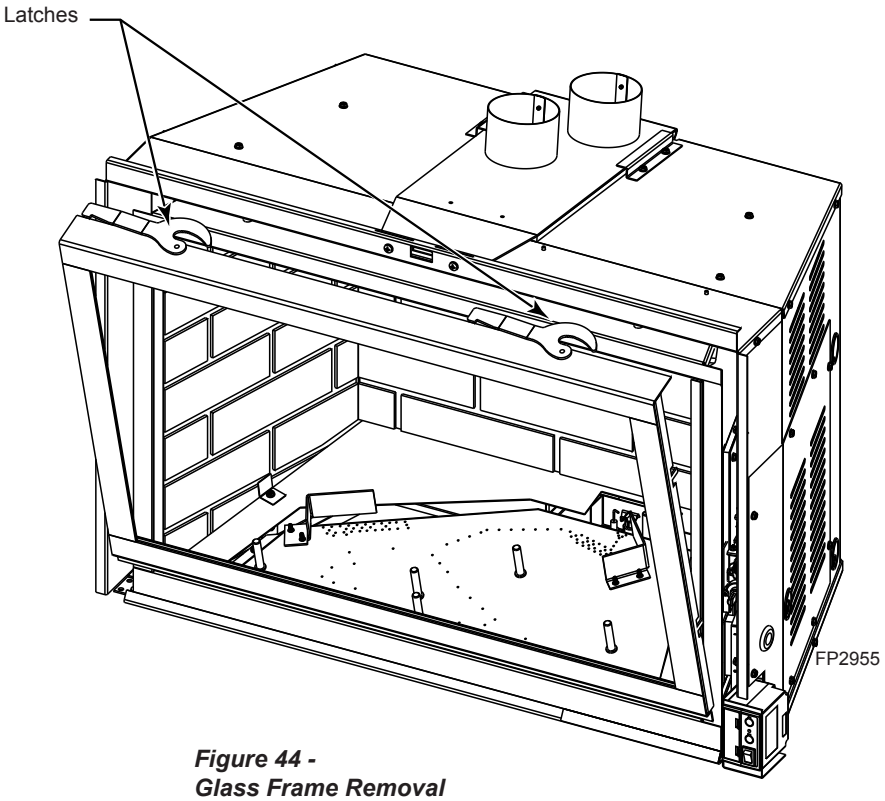


Figure 44 -
Glass Frame Removal

BLOWER REPLACEMENT

Turn off the unit and allow to cool completely. Turn off gas at shut-off and disconnect all electricity to unit.

1. Remove the exhaust/intake plate assembly. Refer to Page 13. Pull unit out of fireplace.
2. Unfasten two (2) plates on the rear of the unit.
3. Attach blowers to the plates.
4. Wire blower according to the wiring diagram.
5. Reinstall the plate onto the back of the unit.
6. Slide unit into fireplace. Reinstall exhaust/intake assembly.

CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

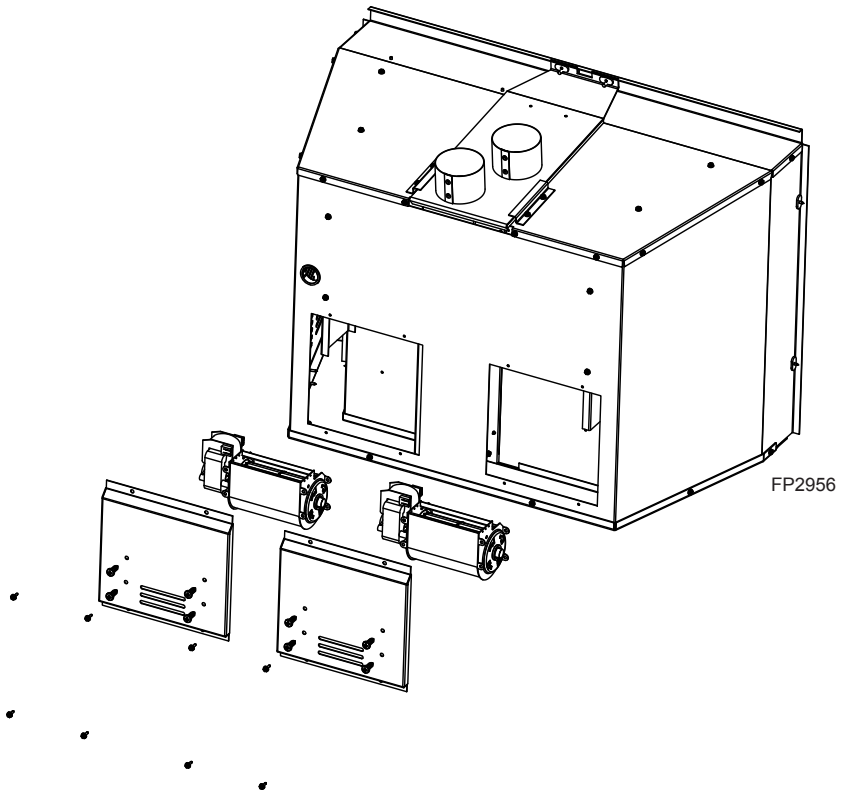


Figure 45 -
Blower Removal and Assembly

Make sure the gas valve knob is in the “OFF” position. Wait at least five (5) minutes before start-ing maintenance.

VENTING SYSTEM

A qualified agency should examine the venting system annually.

CLEANING GLASS

Clean the ceramic glass periodically. Condensation will sometimes form on the glass during a cold startup. This is normal for all gas fireplaces and inserts. This condensation often attracts dust and lint to the surface of the glass. The initial paint curing of the appliance can also leave a slight film on the glass. This is a temporary problem.

You should clean the glass after the first two weeks of use. After that, you should clean the glass no more than two or three times a season. Use a mild glass cleaner to clean the door. Do not use abrasive cleaners. They will damage the glass surface.

PILOT AND BURNER FLAMES

Visually check pilot and burner flames periodically. *Refer to Figure 46* for typical burner flame. *Refer to Figure 47* for typical pilot flame.

Figure 46 -
Typical Burner Flame

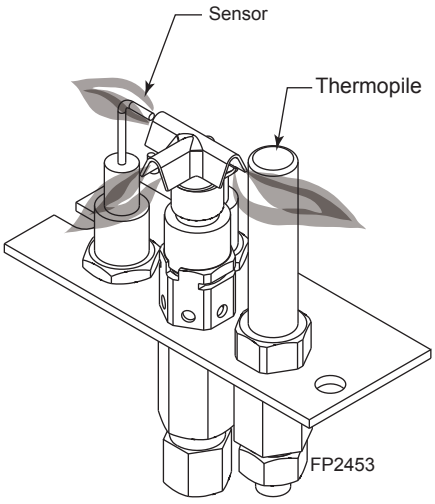


Figure 47 -
Typical Pilot Flame

FIREBOX CLEANING

WARNING

- **Allow logs to cool completely before cleaning. Logs reach high temperatures.**
- **Make sure clearances to combustibles leave enough room for maintenance and service.**
- **Carefully reassemble and reseal insert properly after any cleaning or servicing.**

1. Carefully remove log set, and embers from combustion chamber.
2. Vacuum burner compartment thoroughly.
3. Vacuum any dust off logs.
4. Remove any lint from main burner and pilot.
5. Carefully replace log set, and embers in their correct positions. *Refer to Pages 18 through 21.*
6. Replace door.
7. Relight pilot. *Refer to Page 25.*
8. Turn on main burners.

YEARLY SERVICE PROCEDURE

Failure to inspect and maintain heater may lead to improper combustion and a potentially dangerous situation. A qualified technician should do the following once a year.

1. Check pilot flame. Flame should touch approximately 3/8" of the top of thermopile and touch top of thermocouple. *Figure 38* If not, contact dealer for service.
2. Turn switch to “OFF” position and gas shut off to off to turn gas off to heater. *See step “To Turn Off Gas”, Page 25.* Allow heater to cool for 15 minutes. Remove decorative face (if installed) and door glass. *Page 36*
3. Carefully remove log setor stones (if applicable). If logs or stones are severely deteriorated, replace. Check logs or stones for sooting. A small amount of soot along bottom of either is normal. If excessive sooting is found, heater must be adjusted. Contact dealer where you bought heater.
4. Remove rock wool or decorative glass. Clean burner and burner ports. *Figure 48*
5. Replace log set and rock wool or stones and glass according to instructions on Pages 18-21. Replace glass door. Make sure gasket along perimeter of glass contacts face of firebox and forms an airtight seal. Realign if airtight seal is not formed. Replace door glass and glass frame if damaged.
6. Inspect area around controls. Clean if necessary. Check gas control valve and all gas lines. If damaged, do not use heater. Contact your dealer.
7. Start pilot and turn on main burner. Flames should be orange/yellow and not touch top of firebox. If pilot or main burners do not burn correctly, contact your dealer for service. Monitor blower operation.

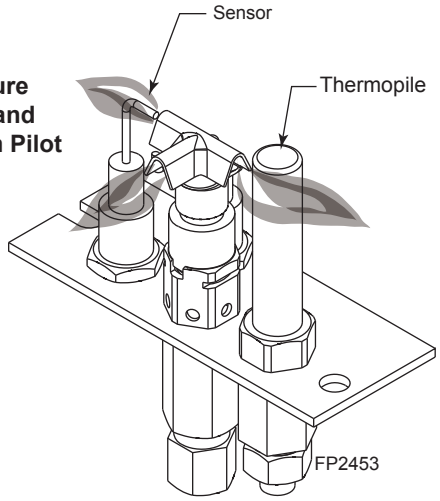


Figure 38 -
Before taking unit apart, check pilot flame. Flame should touch thermocouple and thermopile.

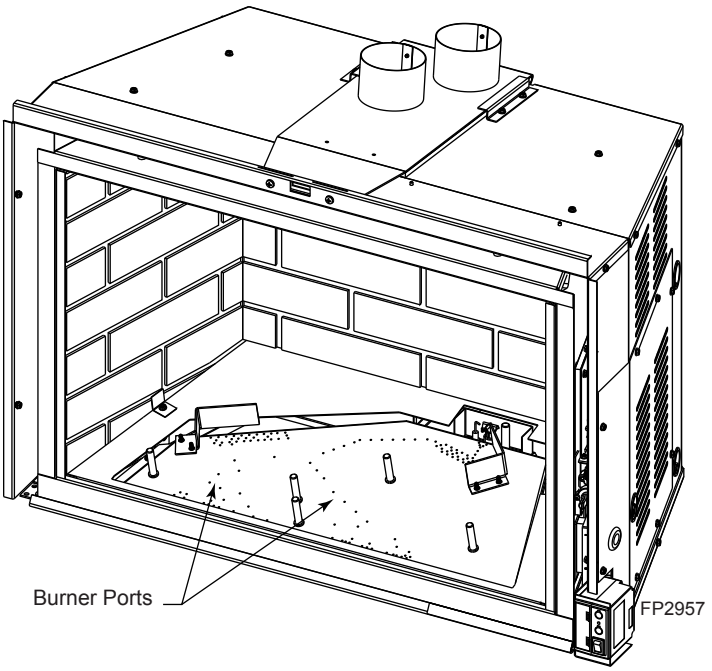
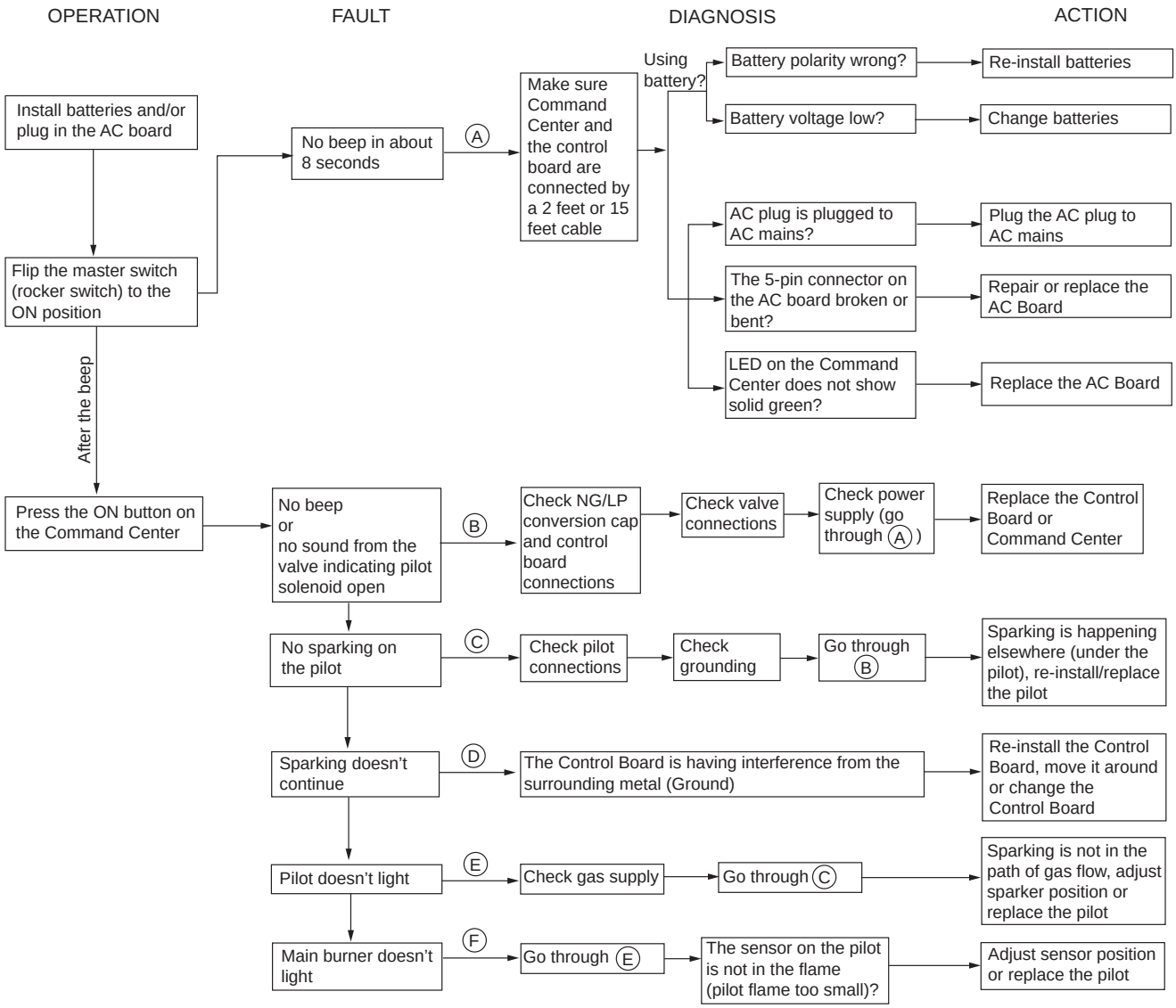
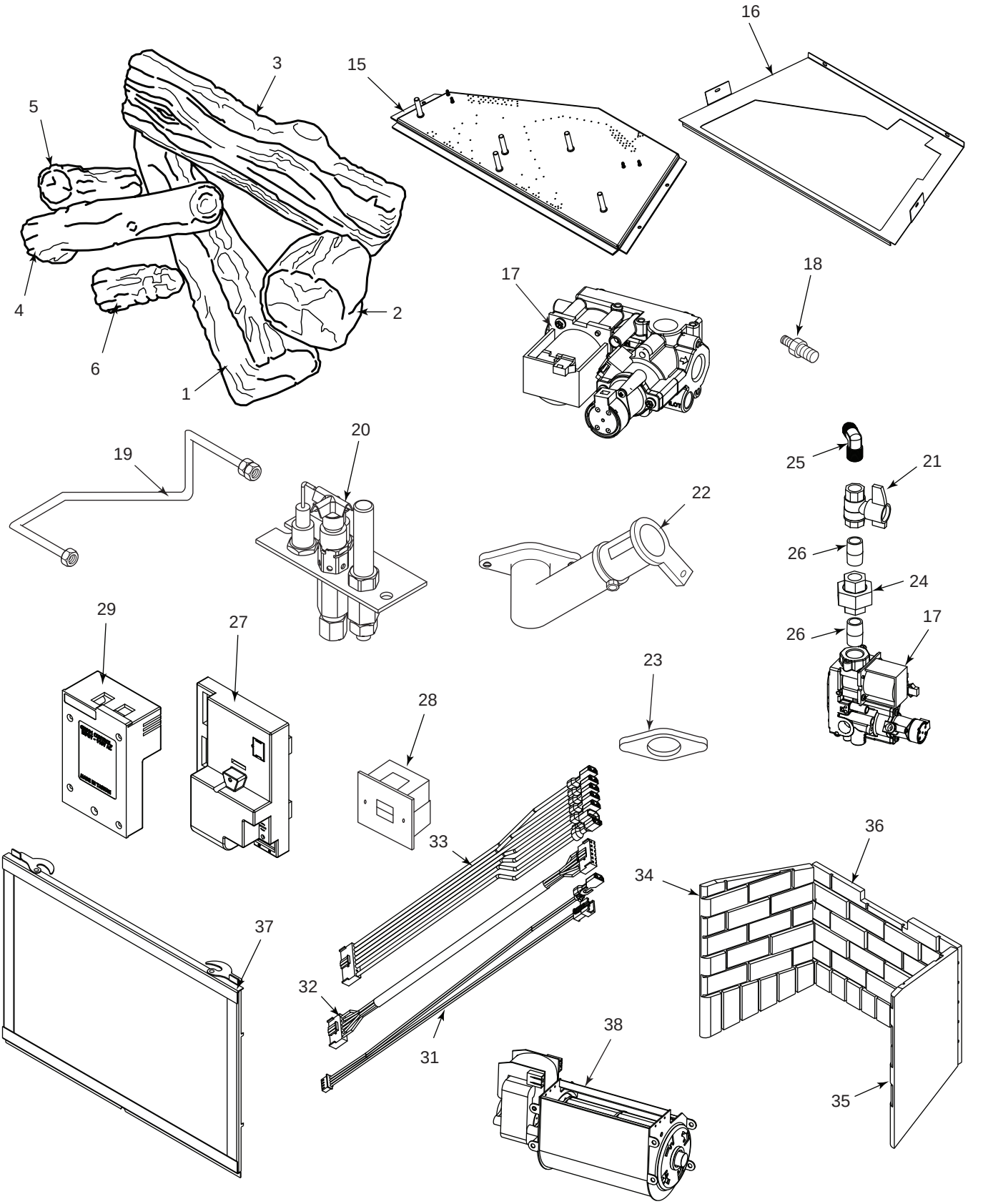


Figure 48 -
Check Burner Ports and Burners

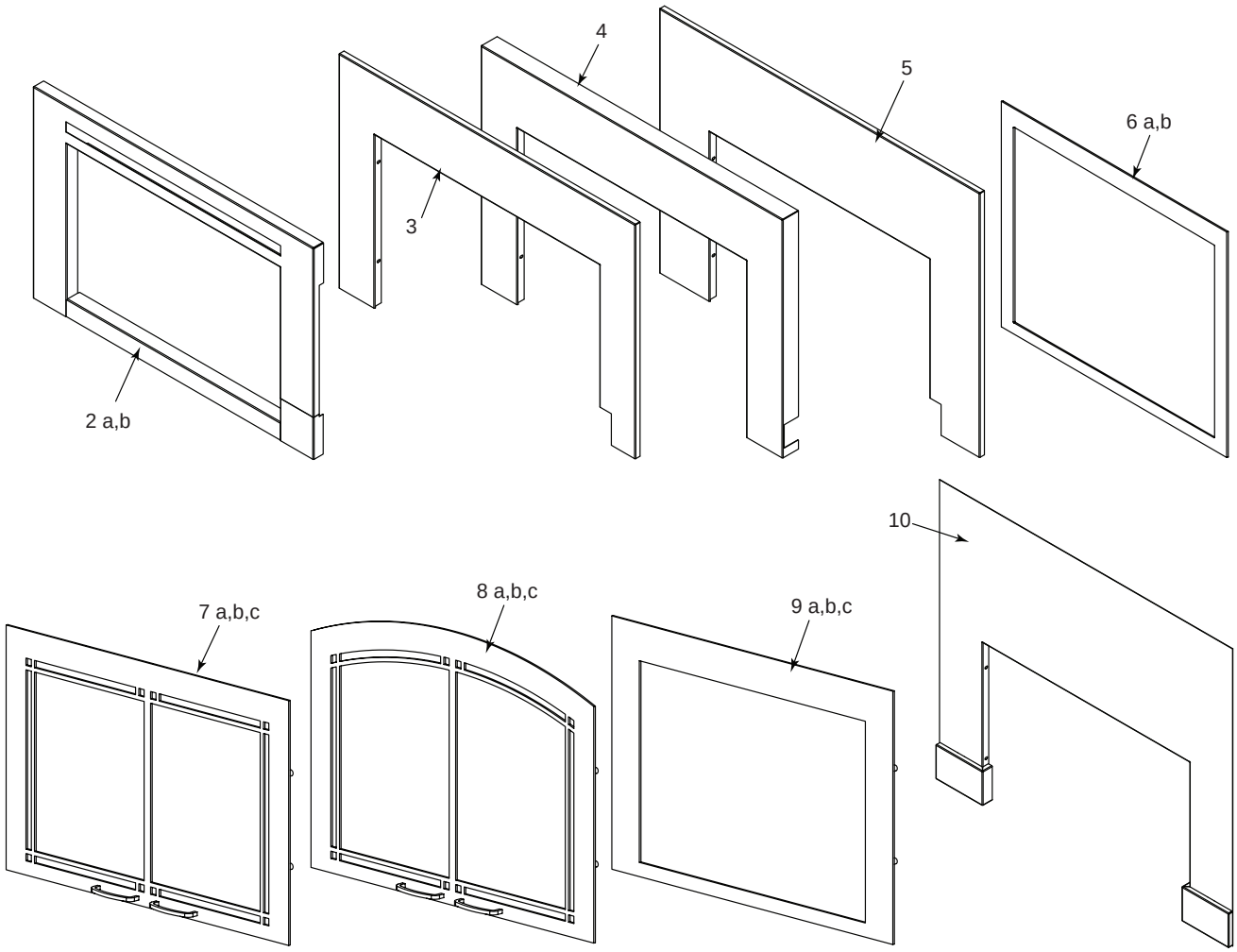
SIGNATURE COMMAND SYSTEM


OPERATION
FAULT
DIAGNOSIS
ACTION
Install batteries and/or plug in the AC board
Flip the master switch (rocker switch) to the ON position
After the beep
Press the ON button on the Command Center
No beep in about 8 seconds
A
Make sure Command Center and the control board are connected by a 2 feet or 15 feet cable
Using battery?
Battery polarity wrong?
Re-install batteries
Battery voltage low?
Change batteries
AC plug is plugged to AC mains?
Plug the AC plug to AC mains
The 5-pin connector on the AC board broken or bent?
Repair or replace the AC Board
LED on the Command Center does not show solid green?
Replace the AC Board
No beep or no sound from the valve indicating pilot solenoid open
B
Check NG/LP conversion cap and control board connections
Check valve connections
Check power supply (go through A)
Replace the Control Board or Command Center
No sparking on the pilot
C
Check pilot connections
Check grounding
Go through B
Sparking is happening elsewhere (under the pilot), re-install/replace the pilot
Sparking doesn't continue
D
The Control Board is having interference from the surrounding metal (Ground)
Re-install the Control Board, move it around or change the Control Board
Pilot doesn't light
E
Check gas supply
Go through C
Sparking is not in the path of gas flow, adjust sparker position or replace the pilot
Main burner doesn't light
F
Go through E
The sensor on the pilot is not in the flame (pilot flame too small)?
Adjust sensor position or replace the pilot


16
3
15
5
4
2
6
1
17
18
19
20
25
21
22
26
24
26
17
29
27
23
28
33
36
34
37
32
31
38
35

Ref.	Description	Qty.	ICFDV30LNTSC	ICFDV30CNTSC
1.	Log #1	1	83D1047	--
2.	Log #2	1	83D1049	--
3.	Log #3	1	83D1045	--
4.	Log #4	1	83D1048	--
5.	Log #5	1	83D1050	--
6.	Log #6	1	83D1046	--
7.	Stone xx White	3	--	20303043
8.	Stone xx Black	1	--	20303041
9.	Stone xx Sand	2	--	20303042
10.	Stone xx Dark Gray	2	--	20303044
11.	Stone Dark Gray	3	--	78D0138
12.	Stone Sand	1	--	78D0140
13.	Stone White	2	--	78D0136
14.	Stone Brown	2	--	78D0139
15.	Burner	1	20303789	20304005
16.	Support Brick	1	20303799	20304048
17.	Valve	1	83D0001	83D0001
18.	Injector	1	20304046	20304046
19.	Flex Line w/ Mounting Plate	1	20303795	20303795
20.	Pilot Assy	1	80D0006	80D0006
21.	Shutoff Valve	1	27D0303	27D0303
22.	Venturi	1	20304031	20304031
23.	Gasket Venturi	1	45D0032	45D0032
24.	Union	1	26D4500	26D4500
25.	Elbow	1	27D7307	27D7307
26.	Fitting	2	27D7026	27D7026
27.	Control Board NG SCS	1	80D0018	80D0018
28.	Command Center SCS	1	80D0005	80D0005
29.	AC Module SCS	1	80D0004	80D0004
30.	Remote Control	1	TSFSC	TSFSC
31.	Wire, Valve/Control Board SCS	1	80D0010	80D0010
32.	Wire, CC/CB 24" SCS	1	80D0008	80D0008
33.	Wire, AC Module SCS	1	80D0009	80D0009
34.	Left Brick Liner	1	20304174	20304174
35.	Right Brick Liner	1	20304173	20304173
36.	Rear Brick Liner	1	20304172	20304172
37.	Glass Door Assy	1	20303891	20303891
38.	Blower	2	56D2196	56D2196
39.	Blower Wire Assy (not shown)	2	83D0521	83D0521
40.	Wire Assy 16" (not shown)	2	83D0522	83D0522
41.	Flex Line (not shown)	1	20303981	20303981
42.	Left Panel Plated	1	--	20304055
43.	Right Panel Plated	1	--	20304056
44.	Rear Panel Plated	1	--	20304054

WARNING **Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.**



Optional Accessories

Ref.	Description	ICFDV30
1.	Light Kit (not shown)	ICF30LK
2a.	Square Face - Textured Black	ICF30SFTB
2b.	Square Face - Iron Age	ICF30SFIA
3.	Small, 3-sided Surround 5/8" Deep - Black	ICF30S3FB
4.	Small, 3-sided Surround 2" Deep - Black	ICF30S3B
5.	Medium, 3-sided Surround 5/8" Deep - Black	ICF30M3FB
6a.	Glass Frame - Vintage Iron	ICF30GTVI
6b.	Glass Frame - Textured Mocha	ICF30GTTM
7a.	Rectangular Double Door - Satin Black	ICF30R2DSB
7b.	Rectangular Double Door - Vintage Iron	ICF30R2DVI
7c.	Rectangular Double Door - Textured Mocha	ICF30R2DTM
8a.	Arched Double Door - Satin Black	ICF30A2DSB
8b.	Arched Double Door - Vintage Iron	ICF30A2DVI
8c.	Arched Double Door - Textured Mocha	ICF30A2DTM
9a.	Floating Trim - Satin Black	ICF30FTSB
9b.	Floating Trim - Vintage Iron	ICF30FTVI
9c.	Floating Trim - Textured Mocha	ICF30FTTM
10.	Trimmable 3-sided Surround - Black	ICF30C3B

Massachusetts Residents Only — Please read and follow these special requirements

NOTE REGARDING VENTED PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

Any residence with a direct vent product must have a CO detector installed in the residence.

Installation of the fireplace or vented gas log in the State of Massachusetts requires the damper to be permanently removed or welded in the fully open position.

In addition, a naturally vented gas log may not be installed in a bedroom or bathroom in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

NOTE REGARDING VENT FREE PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

In addition, vent free products may not be installed in a bedroom or bathroom regardless of size or type in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

CARBON MONOXIDE DETECTOR REQUIREMENTS

(2) Revise 10.8.3 by adding the following additional requirements:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. **Installation of carbon monoxide detectors.** At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors

a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. **Approved Carbon Monoxide Detectors.** Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. **Signage.** A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, “GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS.”

4. **Inspection.** The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

(b) **Exemptions:** The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) **Manufacturer requirements — Gas Equipment Venting System Provided.** When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

(d) **Manufacturer requirements — Gas Equipment Venting System Not Provided.** When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies “special venting systems,” the following requirements shall be satisfied by the manufacturer:

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

2. The “special venting systems” shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design

LIMITED 10 YEAR WARRANTY

Limited 10 year warranty

The following components are warranted for 10 years from the date of purchase of the product: Firebox, Combustion Chamber, Heat Exchanger, Grate, Stainless Steel Burners, Glass (thermal breakage only), Ceramic Fiber Logs and Refractory Brick. Coverage is provided only to the original purchaser and is nontransferable. MHSC will also pay for reasonable labor costs associated with repairing or replacing the component described above for up to three (3) years. Labor rates will be determined by MHSC's published labor rates in effect at the time labor is performed.

Basic warranty

MHSC warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of two (2) years from date of installation. After installation, if any of the components manufactured by MHSC in the appliance are found to be defective in materials or workmanship, MHSC will, at its option, replace or repair the defective components at no charge to the original owner. MHSC will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of two (2) years from date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase.

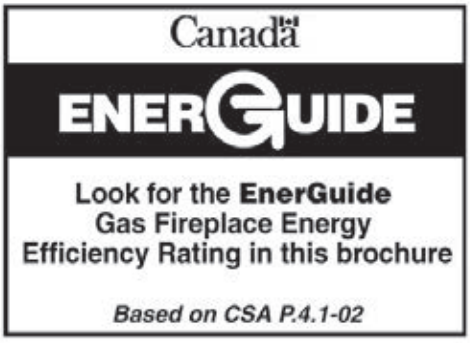
This limited 10 year warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The limited 10 year warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, and does not extend to (1) firebox/burner assembly damage by accident, neglect, misuse, abuse, alterations, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, reinstallation or transportation of defective parts on the appliance, or (3) incidental or consequential damage. All service work must be performed by a Monessen authorized dealer.

This warranty is expressly in lieu of other warranties, expressed or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities. MHSC does not assume for it any other obligations or liabilities in connection with sale or use of the appliance. In states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damage, those limitations or exclusions may not apply to you. You may also have additional rights not covered in the limited 10 year warranty.

MHSC reserves the right to investigate any and all the claims against the limited 10 year warranty and decide upon method of settlement.

If warranty service is needed...

1. Contact your supplier. Make sure you have your warranty, your sales receipt and the model/serial number of your MHSC product.
2. Do not attempt to do any service work yourself.



Efficiency Ratings				
Model	EnerGuide Ratings Fireplace Efficiency (%)	Steady State (%)		D.O.E. (AFUE%)
		Fan-OFF	Fan-ON	
ICFDV30LN	71.9	76.5	77.5	67.2
ICFDV30CN	71.9	76.5	77.5	67.2

MHSC
149 Cleveland Drive • Paris, Kentucky 40361
www.mhsc.com